

Culturally Appropriate Nursing Care of the Type 2 Diabetic Immigrant Population:
Results of an Integrated Literature Review

By:
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Abstract

This project was conducted to provide a basis for the development of practice guidelines for care of the diabetic immigrant client. Based on recommendations from the integrative literature review from published qualitative research studies, these guidelines will provide a basis to aid the Advanced Practice Nurse (APN) in working alongside culturally diverse immigrant patients with diabetes. Leininger's Theory of Cultural Care Diversity and Universality will be the underlying theory for the guideline development. The results of this project will lay the foundation for working with this population by providing guidelines for culturally appropriate care to individuals, and with further research, could inform practice for working with culturally diverse communities as a whole.

Table of Contents

Supervisory Committee	ii
Abstract	iii
Table of Contents	iv
Acknowledgements	vii
Introduction	1
Purpose of the Project	1
Background	2
Canada’s Immigrant Population	2
Brooks, Immigration, and Diabetes	3
Factors Influencing the Immigrant with Diabetes	4
Ideologies Influencing Health Care Delivery	5
Ethnocentrism	5
Medicalization	6
Individual Choice and Blame	7
Neo-liberalism	8
Models of Culture Care	8
Purnell	8
Campinha-Bacote	9

Giger and Davidhizar	10
Cultural Safety	10
Theoretical Approach	11
Leininger's Theory of Culture Care Diversity and Universality	11
Modes of Nursing Actions	14
Methodological Approach	15
Integrative Literature Review	15
Problem Identification	16
Literature Search	17
Data Evaluation	18
Data Analysis	19
Presentation of Results	21
Link to Nursing Practice, Education, and Research	22
Recommendations	23
Conclusion	24
References	26
Appendix A: Recommendations from the CDA	35

Appendix B: Inclusion and Exclusion Criteria	36
Appendix C: Themes Based on the Sunrise Model	37
Appendix D: Practice Guidelines to Facilitate Culturally Appropriate Diabetes Care	39
Appendix E: Qualitative Validity Criteria	41
Appendix F: Review of Included Studies	42

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Culturally Appropriate Nursing Care of the Type 2 Diabetic Immigrant Population: Results of an Integrated Literature Review

Introduction

Purpose of the project.

The focus of my project is the diabetic immigrant population. As an Advanced Practice Nurse (APN) working in an increasingly multicultural society, providing culturally competent care to all individuals and families is becoming an increasingly important practice. Specifically, as a diabetes educator in primary care, I encounter patients that represent a broad range of cultures, religions, ethnicities, genders, and age demographics. There are various comprehensive assessment tools such as Leininger's Sunrise Model (Leininger, 2001), Purnell's Model for Cultural Competence (Purnell & Paulanka, 1998), Campinha-Bacote's Model of Cultural Competence (Campinha-Bacote, 2002), and Giger and Davidhizar's Transcultural Assessment Model (Giger & Davidhizar, 1999), that can be used in caring for the immigrant client. In addition to these models, the concept of cultural safety focuses on the attitudes that nurses bring to practice and in essence attempts to change the effects of their social conditioning on providing nursing care (Ramsden, 1992). For the purposes of this project, I will use Leininger's Theory of Culture Care Diversity and Universality to aid in the development of clinical practice guidelines (CPGs) for an APN to use while working with individual immigrants with diabetes. Leininger's theory is appropriate for the scope of this project because it includes the concept of care as central to nursing and seeks to understand people in terms of their "lifeways, cultural values and beliefs, symbols, material and nonmaterial forms, and living contexts" (Leininger, 1988, p. 155). The Canadian Diabetes Association (Canadian Diabetes Association Clinical Practice Guidelines Expert Committee, 2008) outlines guidelines for practitioners working with diabetic patients that

can be used in conjunction with the proposed guidelines that result from this literature review. These results will provide me with a foundation for working with this population in a culturally appropriate manner.

Background.

Canada's immigrant population and diabetes. In an increasingly globalized society, Canada has become the destination of choice for various immigrants seeking work, political stability, and a safe and secure country to call home. According to Statistics Canada (2008), Alberta was home to 454,200 visible minorities in 2006, which account for 13.9% of the total population. More specifically, many immigrants (especially temporary foreign workers) settle in urban centers and are also drawn to rural areas where jobs are abundant. Many of the workers decide to settle in the area long-term and often are in the process of bringing their families over from their homeland. The area has hosted workers from a variety of regions, including various countries in Africa, Asia, and South America.

In the last three years since starting my position as a diabetes educator in primary care, I have become increasingly aware of the disparities that exist within the health care system between Canadians and immigrants. For these individuals and their families, accessing necessary health services can be problematic due to lack of knowledge about how the health system works and possible language barriers. Anderson et al. (1995) agree that culture plays a major role in not only defining how we experience health and illness, but the methods we use to find appropriate health care. Immigrants coming into Canada are frequently accustomed to a very different health care delivery system and standard of living. They bring with them a diverse definition of health, which tends to be more holistically based, and includes all aspects of the person's environment

(Halli & Anchan, 2005). Oftentimes, the Western value of autonomy and individual responsibility is not shared amongst immigrants (Tracy, 2009). Culture can also play a role in the ideas and attitudes surrounding disability and disease. Frequently, there are differences in attitude toward disability and illness between the migrant and the predominant culture of the host country (Westbrook, Legge, & Pennay, 1993). Therefore, culture is an important aspect of care for the health care provider to address in order to provide the best and most appropriate holistic care to individuals, their families, and these culturally diverse communities as a whole.

In 2005, 5.5% of Canada's population was diagnosed with diabetes (Canadian Diabetes Association Clinical Practice Guidelines Expert Committee, 2008). It is already known that the prevalence of type 2 diabetes is rising at pandemic rates worldwide, especially within certain ethnic groups (Whittemore, 2005). About 77% of new Canadian immigrants hail from countries known to be at higher risk for developing diabetes, including immigrants from Asia and Africa (Canadian Diabetes Association, 2003). Chacko (2003) concludes that individual experiences of diabetes and health management decisions are closely linked to culture and environment. If this is true, an individual's understanding of both health and diabetes are influenced by culture. As the incidence of diabetes increases, specifically within the immigrant population, Canada's health care system will undoubtedly continue to be impacted.

Brooks, immigration, and diabetes. Brooks (the city in which I work) has a population of 12 500, of which over 2 000 immigrants were recorded in the 2006 census, and 920 of those immigrated to Canada between the years 2001-2006 (Statistics Canada, 2008). Over half of the visible minorities in Brooks described themselves as 'black', and the second largest population was South Asian (Statistics Canada). Despite the high immigrant population, only 165 citizens of Brooks claimed to know neither French nor English (Statistics Canada). The prevalence of

diabetes has recently been documented in Alberta, with about 12 000 new cases identified in 2004 and an increasing number of adults living with diabetes, documented as 130 000 (Johnson & Vermeulen, 2007). In Brooks specifically, about 5% of adults over the age of twenty were documented as having diabetes in 2004 (Johnson & Vermeulen, 2007). Unfortunately, this study does not differentiate what portion of diabetics are immigrants in Brooks. However, with the knowledge of the link between diabetes and ethnicity, it is known that populations of developing countries, minority groups, and population groups in the industrialized countries with lower socioeconomic status are at greatest risk of developing diabetes (Zimmet, 2000). Therefore, it is essential for the APN to be aware of this marginalized population with diabetes so they are not falling through the cracks of Canada's health system and society in general.

Factors influencing the immigrant with diabetes. Immigrants settling in Canada from other countries are often accustomed to a very different health care system and standard of living, also bringing with them a different definition of health, which tends to be more holistically based (Halli & Anchan, 2005). Through the acculturation process, an individual can experience alterations in their sense of self and personal health status (Ryder, Alden, & Paulhus, 2000). The stress of dealing with diabetes as well as the process of immigration can be taxing for an individual and family moving to Canada (Cox & Gonder-Frederick, 1992). The evidence from available literature on diabetes knowledge and understanding within the immigrant population points to a disparity between the immigrant populations in comparison to the non-immigrant ones (Arcury, Skelly, Gesler, & Dougherty, 2004; Hjelm, Nyberg, Isacsson, & Apelqvist, 1999; McEwen, Baird, & Gallegos, 2007; Ponzio et al., 2006; Wallin, Lofvander, & Ahlstrom, 2007; Wandell, Wajngot, de Faire, & Hellenius, 2007). This growing disparity highlights the need for an understanding of the unique experience and needs of these individuals, families, and

communities. Pollock (1993) noted that research investigating chronic illness must consider an individual's perceptions of what is meaningful and what is helpful in attaining quality of life. Various social, economic, political, historical, and cultural factors can also influence the lived experience of an immigrant client with diabetes. The APN working with these clients needs a firm understanding of how these factors influence the client's life and how to best work with the client to overcome potential barriers. Models of culture care are ways in which an APN can begin this essential process of understanding the link between an individual's culture, health, and illness experience.

Ideologies influencing health care delivery.

Ethnocentrism. Ethnocentrism, as defined by Leininger and McFarland (2006), refers to “the belief that one's own ways are the best, most superior or preferred ways to act, believe, or behave” (p. 50). This is a universal ideology that can influence one's thinking and actions without awareness of the effect on others. Modifying and changing one's ethnocentric viewpoints are crucial in order to carry on effective and therapeutic relationships with patients and families of different cultures. Continuing to practice with an ethnocentric mindset will prove to be destructive and may bring about cultural stresses and ultimately negative consequences (Leininger & McFarland, 2006). This ideology fails to focus on the patient within context, and does not recognize what the patient's definition of health is or their specific health care goals. A nurse practicing from an ethnocentric ideology fails to inquire of the client what their specific experience with type 2 diabetes has been and how their culture has or has not affected their management of the disease. For example, assuming that the Western diet is superior to those of other cultures is short-sighted and ignorant. Failure of a diabetes education program to have teaching materials with ethnically appropriate food choices is an example of an underlying

ethnocentric ideology that is present in our health system. These types of cultural stereotypes can inhibit openness among patients when practitioners view their client's cultural practices as inferior.

Medicalization. The ideology of medicalization is obvious as new immigrants enter a Western-dominated health care system. According to Culhane-Pera, Her, and Her (2007), Hmong refugees living in America feel they developed diabetes from "being out of balance" by not sweating out the toxins they have taken in from their environment and food since relocating. Thus, the Hmong people from Laos perceived that diabetes was caused from the social stress of not belonging in the United States, but only feeling in balance in their homeland, where they are free to eat rice and work in the fields to sweat out the toxins. Through moving to a Westernized culture, the Hmong people were submerged in a health system that did not see them in their particular context. Medicalization upholds the biomedical model of being outcome focused whereas a holistic care model is focused on the individual's contextual experience. As mentioned previously, a number of new immigrants outline the importance of managing their type 2 diabetes with natural remedies and non-Western methods such reflexology and meditation (Gill, Redmond, Garratt, & Paisey, 1994). When the Hmong people took Western medicines, they felt weak and sick and some men felt that the medicines caused impotence (Culhane-Pera et al., 2007). Therefore, they would not take them because they felt they were not a cure for the diabetes, and the only cure would be to return to their homeland (Culhane-Pera et al.). The ideology of medicalization seeks to create alarm in patients as a method to increase compliance to the prescribed Western medical treatments (Cowling, Shattell, & Todd, 2006). This fear tactic is used as a way to force patients into managing their diabetes that disregards the patient's own thoughts and beliefs about health and illness and forces them to think that the Western medical

model is the only option. Without any other options, patients and families are left vulnerable, hopeless and alone in the management of their illness. As no attempt is made to focus on the social determinants of health and illness, medicalization does not look at individual context at all. It does not take into account the patients' personal history but rather pigeonholes all type 2 diabetics into the same category without regard for their distinct cultural beliefs. This model of care fails to meet the goals of the patient but rather is focused on the goals of the health care professional.

Individual choice and blame. Individual blame of the patient for his/her disease state is common practice among practitioners in the biomedical model of care. An abundance of factors influence an individual's choice and his/her various decisions about health care practice and lifestyle, but an important point to stress is that the choice is the patient's own. We are not responsible, nor is it ethical to practice forced compliance to a particular lifestyle or way of managing a disease. Practitioners in Western culture may see the use of alternative medicines as an example of non-compliance with modern medicine. However, Chacko (2003) notes that the use of traditional remedies is far from being non-compliant with modern medicine, but rather embraces both therapies as a way of maintaining good health from the patient's perspective. Western cultural ideals generally embrace individualism, independence, and personal achievement. Westbrook, Legge, and Pennay (1993) uphold that the ideology upholding the concept of individualism will result in further marginalization and stigmatization of at-risk populations. Many people immigrating to first world countries embrace the ideal of collectivism, in which more importance is placed on the goals of the group as opposed to the goals of the individual (Finucane & McMullen, 2008). Individual blame will ultimately result in further marginalization and prevent these populations from receiving the health care they require.

Neo-liberalism. Neo-liberal ideology maintains that a hands-off, free market approach to health care will result in unparalleled social well-being for all concerned (Navarro, 2007). The reality is that a marginalized population's health status will ultimately suffer and further deteriorate due to lack of funding and social support. As neo-liberal ideology becomes a globalized phenomenon and a driving force behind migration, its antidemocratic secrecy prevents global society from reaching equity and dignity for all individuals (McGuire & Georges, 2003). Immigrant populations may have already experienced inequalities amongst individuals from the host country and as a result may feel they deserve the poor health care they are receiving, are not worthy of positive health outcomes based on their background, or that they are outsiders. As Navarro (2007) highlights, political analysis must continue in order for society to progress and thereby disseminate the hierarchy of power between countries affected by the neo-liberal ideology.

Models of cultural care.

Purnell. Larry Purnell first developed the Purnell Model for Cultural Competence as a framework for student nurses to use as a comprehensive assessment tool (Purnell, 2002). The model is based on twelve cultural domains: overview/heritage, communication, family roles and organization, workforce issues, bio-cultural ecology, high risk behaviors, nutrition, pregnancy, and childbearing practices, death rituals, spirituality, health care practice, and health care practitioner (Purnell). These domains are not meant to be used individually, but are to be seen in relation to each other in a circular, all-encompassing way. The author defines cultural competence as “the adaptation of care in a manner that is consistent with the culture of the client and is therefore a conscious process and nonlinear” (Purnell, p. 193). This model can be applied to nursing practice, education, administration, and research. Developed in 1998, the model is

intended for use by all health care professionals, and therefore is not grounded specifically in nursing. Critiques of the model might suggest that a danger in using the model resides in the possibility of over-generalizing information gleaned from an individual encounter to a population as a whole. The model has been used on an international basis, for example, by nurses and physicians in Panama who have used the model as an assessment guide to record accounts of indigenous values, beliefs, and specific practices (Purnell). Being in its infancy, the model lacks years of testing and research, but does hold promise as a model for providing culturally competent care. To my knowledge, the model has not been used directly in the management of diabetes in the immigrant population. Only time (and further research) will prove its application to this area of practice as a worthwhile pursuit.

Campinha-Bacote. Campinha-Bacote views cultural competence as a process that occurs over time, in which the health care providers must be constantly assessing and changing their practice to integrate “cultural awareness, cultural knowledge, cultural skill, cultural encounters, and cultural desire” (2002, p. 181). *The Process of Cultural Competence in the Delivery of Healthcare Services* is a model that requires health care professionals to see themselves as becoming culturally competent rather than already achieving competence (Campinha-Bacote, 1999). The model is based on works by both Leininger (1978) and Pedersen (1988). Within the model, five major constructs are explored: cultural awareness, cultural knowledge, cultural skill, cultural encounters, and cultural desire (Campinha-Bacote, 2002). The model can be used in all areas of health provision, including clinical, administration, research, policy development, and education (Campinha-Bacote, 2002). According to Campinha-Bacote (1999), learning culture is a never-ending process that develops primarily through cultural encounters. The goal for this learning is to eventually develop what is often referred to as cultural humility (Tervalon &

Murray-Garcia, 1998). Some might be critical of the model's focus on the health care practitioner, as opposed to the widely held theory that the patient should be the center of our practice as nurses. Much like Purnell's model, Campinha-Bacote's model is still in its infancy, so further research may prove its usefulness for working with the diabetic immigrant population.

Giger and Davidhizar. The Giger and Davidhizar Transcultural Assessment Model was developed in 1988. Much like the Purnell Model for Cultural Competence, it emerged from the need for nursing students to assess and work with culturally diverse populations (Giger & Davidhizar, 2002). This model is based on the premise that each individual is unique and thus should be assessed and treated according to six cultural phenomena: communication, space, social organization, time, environmental control, and biological variations (Giger & Davidhizar). The model is based on the definition of culture as “the patterned behavioral response that develops over time as a result of imprinting the mind through social and religious structures and intellectual and artistic manifestations” (Giger & Davidhizar, p. 187). Some may criticize the model for placing a higher priority on care of the individual, as opposed to care for families and communities as a whole. Future development of the theory, including research by Giger and Strickland, will focus on possible biological and genetic variations amongst individuals. Yet again, there is no research with the diabetic immigrant population using this model of care that I am aware of thus far.

Cultural safety. The concept of cultural safety was originally developed in New Zealand in the latter 1980s in which a group of Maori nurses analyzed nursing practice in New Zealand through the lens of the Maori indigenous population (Ramsden, 1992). The cultural safety ideal is more about meeting an ethical standard in nursing practice. This concept acknowledges that most cultural groups are perceived from a certain lens, which oftentimes is that of a dominant

white group (Polaschek, 1998). The concept of cultural safety is contrasted by Leininger's Theory of Culture Care Diversity and Universality in that the latter does not explicitly recognize every health care interaction as being subjective (Polaschek, 1998). Cultural safety stresses the importance of viewing the individual/family unit within their respective social structure. This idea is based on the assumption of multiculturalism, which "suggests the need to recognize a variety of cultures within a society, each with their unique characteristics, as all of equal value" (Polaschek, 1998, p. 453). Therefore, culturally safe nursing practice refers to any "actions which recognize, respect, and nurture" unique cultural identities and "safely meet their needs, expectations, and rights" (Wood & Schwass, 1993, p. 5-6). Like Leininger, Ramsden advocates for respect of the clients for who nurses care. However, (and perhaps this is the main difference between the two theories) the latter's focus is not on the client(s) themselves, but rather on the nurses' awareness of power within society. The primary goal of cultural safety is focusing on shared power with the client(s) (Papps, 2002). This concept has been usefully exported to inform mental health policy discourse in British Columbia, Canada, through research by Smye and Browne (2002). Much like how the notion of cultural safety informed former researchers to focus on specific health outcomes of aboriginals suffering from mental illness, I think there is equal merit in exploring use of the concept towards helping to develop an understanding of health outcomes associated with the diabetic immigrant population. Once again, as far as I am aware, research has yet to use the cultural safety lens with this underserved population.

Theoretical Approach

Leininger's Theory of Culture Care Diversity and Universality.

Madeleine Leininger developed the Theory of Culture Care Diversity and Universality through extensive qualitative research in the disciplines of anthropology, ethnography, and nursing (Leininger, 2002). Over the last fifty years, the theory has been implemented to aid nursing students and practicing nurses alike to understand cultural differences in caring for individuals and families of various cultural backgrounds. Leininger and her colleagues define culture as “the learned, shared and transmitted values, beliefs, norms, and life ways of a particular culture that guide thinking, decisions, and actions in patterned ways and often inter-generationally” (Leininger & McFarland, 2002, p. 47). Therefore, an individual’s understanding of health and diseases such as diabetes is culturally influenced. A key point of the theory is that of human care. Leininger & McFarland define care as the essence of nursing, and it is culturally based care that leads to better health outcomes, overall well-being and the means to cope with illness and death (Leininger & McFarland, 2002). Ultimately, the goal of the advanced practice nurse working with an immigrant population living with type 2 diabetes is to provide culturally appropriate care to individuals, families and communities. Leininger and McFarland (2002) refer to culturally competent nursing care as encompassing the use of culturally based care and health knowledge in a sensitive, creative, and meaningful way. This process requires in depth self-reflection as the APN explores and identifies his/her particular biases and stereotypes before entering into practice. The nurse must also acquire grounded data from key stakeholders in the community and family as determined by the patient (Leininger and McFarland). Worldview and social structure factors including “religion, economics, education, technology, politics, kinship, ethno-history, environment, language, and generic and professional care factors” need to be directly uncovered from emic data, as factors that are related to “health, well-being, illness, and death” (Leininger and McFarland, p. 78). In order to facilitate this process, the Sunrise Model

(see Figure 1) may be used to understand these broad, holistic dimensions of care and begin the process of knowing people within their culture and simultaneously challenge traditional holistic views (Leininger and McFarland). This model can be used at an individual, family, community, or institutional level (Leininger, 2001). The data derived from using the model, the three modes of action and decision making, and making use of the CDA guidelines, can be foundational to develop culturally sensitive communication and work with individuals and families to provide the best care.

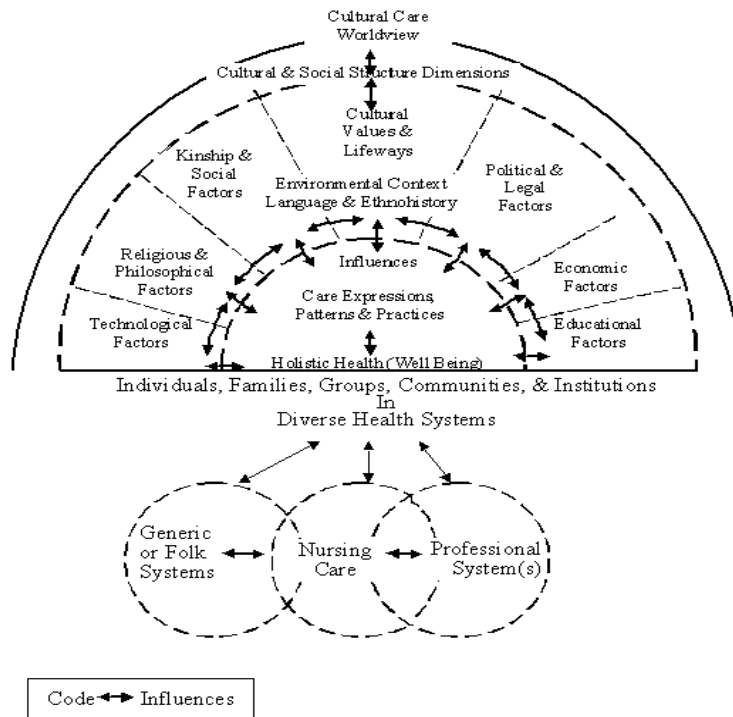


Figure 1. Leininger's Sunrise Model to Depict Theory of Culture Care Diversity and Universality (Leininger, 2001, p. 43)

I have chosen Leininger's Theory of Culture Care Diversity and Universality for my project for its focus on the human care phenomenon, as Leininger defines care as the essence of nursing. It is culturally based care that leads to better health outcomes, overall well-being, and the means to cope with illness and death (Leininger & McFarland, 2002). As I continue working as a diabetes educator in a culturally diverse setting, this theory resonates with how I view individuals and families in my practice. The theory acknowledges that individuals should be at the centre of care, something that I have always upheld as the essence of nursing. My project goals mirror the theory's central concept of nursing, most importantly viewing the individual within their context. As an extension of this belief, the Sunrise Model provides a practical tool to use within my project to categorize the themes that surfaced from the analysis of the literature. To my knowledge, the theory has not been used to look specifically at the population of immigrants with type 2 diabetes.

Modes of nursing actions.

Leininger's three modes of nursing actions and decisions include: 1) cultural care preservation and continuation, 2) cultural care accommodation, and 3) cultural care re-patterning and restructuring (Leininger, 2001). The first mode, culture care preservation and continuation, refers to "assistive, supporting, facilitative, or enabling professional actions and decisions" that will help persons of a certain culture keep relevant care values that may be needed for maintaining well-being, coping with illness, or dying (Leininger, 2001, p. 48). Within diabetes care, this may consist of dealing with what the diagnosis means to the individual and/or family, or perhaps how the person can continue to eat traditional foods without a negative impact on blood glucose levels. The second mode, culture care accommodation, refers to certain professional actions or decisions that aid people "to adapt to or to negotiate with, others for a

beneficial or satisfying health outcome” (Leininger, 2001, p. 48). In diabetes care, this may take the form of talking with patients about ways they could incorporate physical activity into their daily routines. The third and final mode consists of culture care re-patterning and/or restructuring to support the client to “reorder, change, or greatly modify their lifeways for new, different, and beneficial health care patterns” but at the same time making sure to respect those “cultural values and beliefs and still providing a beneficial or healthier lifeway than before the changes were co-established with the client(s)” (Leininger, 2001, p. 49). In diabetes care, this could mean having discussions with clients about ways to cut back on smoking tobacco, with the goal of eventually quitting. Each of these modes can provide a basis from which an APN can care for immigrant individuals and families with diabetes. As the APN uses these concepts, it is important to remember that only through co-participation of both client and nurse on decisions and actions that affect care, can culturally congruent care be attained (Leininger, 2001).

Methodological Approach

Integrative literature review.

An integrative literature review is the chosen methodology to address the topic of providing culturally appropriate diabetes care. Whittemore and Knafl (2005) describe an integrative review as “the broadest type of research review methods allowing for simultaneous inclusion of experimental and non-experimental research in order to more fully understand a phenomena of interest” (p. 547). The aim of the review is to summarize the existing literature and eventually develop clinical practice guidelines (CPGs) for providing culturally appropriate care for individual immigrants with diabetes. Whittemore (2005) describes the various stages of research review to include five stages: problem identification stage, literature search stage, data

evaluation stage, data analysis stage, and presentation of results stage. This review will include each of the five steps as outlined by Whitemore.

Problem identification stage. Developing a clear problem is the first step in the literature review process. In this case, lack of CPG in relation to assessing a diabetic immigrant patient, with a focus on the qualitative research, is the problem. CPGs are created as recommendations to clinicians in relation to making decisions about individual patient management (Haines & Jones, 1994). Polit and Beck (2008) conclude that CPGs “represent an effort to distill a large body of evidence into a manageable form” (p. 34). For example, the Canadian Diabetes Association 2008 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada (2008), provide a comprehensive tool to use in practice that is evidence-based. However, as perhaps best said by the committee themselves,

Guidelines are meant to aid in decision making, but the therapeutic decisions are made at the level of the patient-physician relationship. Evidence-based guidelines try to weigh the benefit and harm of various treatments; however, patient preferences are not always included in clinical research, although quality-of-life assessments are becoming standard practice. It is important to remind healthcare professionals about the need to incorporate patient values and preferences into decision making (Canadian Diabetes Association Clinical Practice Guidelines Expert Committee, 2008, p. 15).

Within the CPGs, there is a section devoted to specific guidelines to managing type 2 diabetes in the high-risk ethnic population (see Appendix A). These appear to be comprehensive and helpful for clinicians in practice, however these are (as CPGs generally are) largely based on quantitative studies. Therefore, this literature review will focus only on qualitative studies related to the immigrant population with type 2 diabetes. Perhaps the term “general recommendations” would be more appropriate because these guidelines will be solely based on the qualitative data. These guidelines are by no means meant to be used as a stand alone recipe, but rather used alongside

the Canadian Diabetes Association's (CDA's) CPG to provide a more comprehensive look at the research which combines both qualitative and quantitative methods. Walker (2003) warns that choosing to rely on evidence-based practice that upholds the positivist philosophy can potentially provide a distorted representation of a certain topic. Qualitative research's emphasis on holism, dispelling assumptions, and its focus on real life experiences are integral to include in diabetes education. As a diabetes educator embracing the qualitative research perspective, it is my goal to "improve quality of life for others, to prevent hardship, to liberate people, (and) to further understanding of life's mysteries of experience" (Munhall, 2007, p. 7). Qualitative research is also integral to studying different cultures, in that the researchers "search for the differences not only between cultures but also within cultures" and as such they "challenge stereotypes, presuppositions, and assumptions" (Munhall, p. 11). Therefore, to offset the CPGs already in place in the area of diabetes, I have chosen to focus my review on qualitative research that has a history of embracing the human and relational side of nursing practice.

Literature search stage. This search has only included published studies that are qualitative, and will exclude mixed method and quantitative designs (see Appendix B for inclusion and exclusion criteria). Unpublished manuscripts, including abstracts and dissertations, have been excluded from the search. Various electronic databases, such as the Cumulative Index of Nursing and Allied Health Literature (CINAHL), Academic Search Complete, PUBMED, Social Science Citation Index (SSCI), PSYC INFO, and Google Scholar, were used to search for the articles. The keywords used in the search included: culture care, cultural assessment, diabetes assessment, immigrant, Leininger, Theory of Culture Care Diversity and Universality, clinical practice guidelines, qualitative, and diabetic immigrant. Leininger's Theory of Culture Care Diversity and Universality was used as a background perspective for the literature review and

guideline development based only on qualitative data. Searching the database PSYC info with differing combinations of the above keywords revealed five studies that met the inclusion criteria. A search of the CINAHL database revealed one more study that met the search criteria. The SSCI database revealed no new studies within the criteria. Academic Search Complete revealed three more studies that could be considered in the review. Google Scholar revealed six studies that met all the inclusion criteria. Therefore, there were a total of twelve studies included in the literature review. Some of the studies that originally came up with the keywords used had to be excluded from the review because they were quantitative designs despite meeting all the other specified inclusion criteria (eight studies). No mixed method design studies met all other inclusion criteria. Four studies met all the inclusion criteria except they used non-immigrant population as a control group and two studies that were identified that met all other inclusion criteria were program evaluation.

Data evaluation stage. As Whittemore (2005) suggests, common data should be extracted from the included studies and analyzed. To outline components of the studies, a chart was composed to include type of research, theoretical underpinnings, methods, description of methodology, ethics approval, extracted themes, and relevance to nursing practice (see Appendix F). As an integral part of the evaluation stage, each study was assessed for quality and subsequently assigned a quality score (see Appendix E for the rubric for quality scoring and Appendix F for individual scores assigned). I was the only reviewer to code these studies for quality, and therefore the quality scores would have greater accuracy if another reviewer would have been present and agreement could have been calculated as an average. Quality scores were accounted for in the evaluation of data but no studies were excluded based on poor quality

scoring. All the included studies scored 7.5 and above out of a possible 10, therefore all the studies were considered of high quality.

Data analysis stage. The studies were reviewed in detail, with particular attention to ordering, categorizing, and summarizing the results. This data was subsequently placed in a table format (see Appendix C). Interestingly enough, the themes extracted from the primary sources coincided with the themes presented in Leininger's Sunrise Model (Figure 1). Each of Leininger's factors was addressed in the results of the study, with the exception of technological factors. This could occur because there is a growing controversy about the effectiveness of self-monitoring of blood glucose levels (which is a technological factor of diabetes management), particularly in type 2 diabetic populations taking only oral hypoglycemic agents (Davis, Bruce, & Davis, 2006). This outcome could also occur because technology is not seen as the most important factor by the participants in managing their diabetes.

Religious and philosophical factors that surfaced as important to patients included prayer (Bergland et al., 2007) and certain religious restrictions in relation to food (for example, addressing holidays such as Ramadan for Muslim patients) (Chowdhury et al., 2000). Kinship and social factors that were important included addressing the relation of stress and how the disease had changed their life, yet patients still had to carry out their respective roles in their families (especially women as care providers) (Chesla, Chun, & Kwan, 2009; Hadwiger, 2005; Manderson & Kokanovic, 2006; Wallin et al., 2007). Many patients even tried to shield their family from the worry and distress of the disease, trying to live their lives as if nothing had changed (Chun & Chesla, 2004; Hadwiger, 2005; Wallin et al., 2007). In one study, the disease was even described as a challenge to the family harmony (Chesla, Chun, & Kwan, 2009). Social isolation led to feelings of loss, inadequacy, and distress (Manderson & Kokanovic, 2006). A

bidirectional relationship between emotional health and diabetes seems to exist. Factors around relationship with family and society influenced the relationship between diabetes and emotions (Cherrington et al., 2006). Relationships with doctors were considered important, although hierarchical relationships predominated (Kokanovic & Manderson, 2007). Interestingly, little discussion with doctors about depression occurred (Cherrington et al., 2006). Some participants did not trust their health care providers' opinion (Brown et al., 2007). The patient's specific past history of life in the country where he/she born, including the process of migration, and friends' and families' accounts of diabetes were influential (Brown et al., 2007). Individual suffering was generally experienced as social suffering (Culhane-Pera et al., 2007).

Cultural values and lifeways, including the significance of food, is an important factor in maintaining quality of life (Chun & Chesla, 2004). Prescribed food from health care professionals challenged cultural food beliefs and practices (Chesla, Chun, & Kwan, 2009). Foods were sometimes classified as "strong or weak" and "digestible or indigestible" (Chowdhury et al., 2000). Illness, diabetes, and health were generally viewed in a holistic sense (Chun & Chesla, 2004). There was a distinct preference for natural treatments over conventional treatment (such as pills or insulin) (Brown et al., 2007). Participants incorporated limiting foods, sweating, taking medications, and being calm to restore balance in order to stay healthy (Culhane-Pera et al., 2007). Exercise and physical activity were seen as negative if too strenuous (Chun & Chesla, 2004). Diabetes was viewed in terms of balance and imbalance. Some participants connected the disease with the shared social suffering of refugees living in a country where they did not fit in (Culhane-Pera et al., 2007). Political and legal factors included a focus on blame at the macro-level of social change and the refugee movement as causation of the diabetes (Culhane-Pera et al., 2007). It was the host country where immigrants discovered they

have the disease and feel discriminated against (Hadwiger, 2005). Economic factors included cost of food, particularly different ethnic foods, and their availability as a factor in disease management. As a result, special menu items such as certain meat and sweets were consumed in increased quantities after immigration (Chowdhury et al., 2000). Other economic factors included cost of health services, particularly doctor appointments and medications being too costly (Hadwiger, 2005). An educational issue was the fact that doctors and other providers did not speak the person's first language (Hadwiger, 2005). The themes that surfaced from the literature review were similar to the categories outlined in the Sunrise Model, and focused primarily on religious, philosophical, social, cultural values, political, economic, and educational factors.

Presentation of results stage. Presentation of the results in terms of what should be included in guidelines for facilitating culturally appropriate care in the type 2 diabetic population are outlined in Appendix D. Research guidelines are also outlined, but there were no specific educational guidelines from the included studies. The guidelines should take into account a cultural concern for balance and significance of food rituals (religious or otherwise) (Chesla et al., 2009; Chowdhury et al., 2000). Recommendations for healthy eating should not be constrained by fixed ethnic stereotypes (Chowdhury et al., 2000). In addition, social and cultural context is important to address in terms of facilitating or inhibiting management of diabetes (Chesla et al., 2009; Chun & Chesla, 2004; Hadwiger, 2005; Kokanovic & Manderson, 2006; Manderson & Kokanovic, 2009). Emotional health should be addressed as well as potential depression (Cherrington et al., 2006). Economic and historical contexts should also be explored with patients, in terms of how they are associated with the process of acculturation (Hadwiger, 2005). Patients may require adequate support to sustain behavior change, and most found this

support from others with diabetes (Kokanovic & Manderson, 2006). Therefore, addressing support systems the patient may have (or not have) in place is necessary. Views and expectations for treatment should be evaluated prior to treatment planning and recommendations (Cherrington et al., 2006; Chun & Chesla, 2004). A patient's acculturation levels should be assessed across multiple domains (i.e. language preferences) (Chun & Chesla, 2004). The nurse's assessment should include how the disease impacts the patient's personal, emotional, and social lives, personal meanings and consequent actions developed around the disease, perceived level of threat to lifestyle and life, and limitations and adversities faced by patients (Kokanovic & Manderson, 2007). Opportunities to describe their personal religious practices as they relate to health (i.e. prayer) should be given to patients (Bergland et al., 2007). All patients should be treated individually, but the health professional should have an understanding of the influence of culture on care and disease management (Brown et al., 2007). On a broader note, institutions and health systems should stress the importance of cultural awareness of all health professionals through improving targeted education, and involving community groups in education (Brown et al., 2007). Kleinman's (1980) explanatory models approach may aid in organizing discussion about the disease and discovering common themes (Chun & Chesla, 2004; Culhane-Pera et al., 2007). Research guidelines should address the need to further develop evidence-based guidelines for diabetes care in ethnic groups with culturally appropriate dietary advice (i.e. fasting during Ramadan) (Wallin et al., 2007). Further ethnographic research is necessary to test the strengths and links between gender, community, identity, social roles, and health (Manderson & Kokanovic, 2009).

Link to Nursing Practice, Education, and Research

Clinical practice guidelines are effective in improving outcomes of care for patients with diabetes (Canadian Diabetes Association Clinical Practice Guidelines Expert Committee, 2008). However, these guidelines focus predominantly on quantitative studies and could potentially be missing an essential human aspect and certain depth of human understanding that is found in qualitative literature. Therefore, the proposed guidelines will address this gap in the CDA 2008 CPGs and provide basic practice recommendations which the clinician can practically put to use while working with this population. Further research into this specific area of diabetes in the immigrant population will add to the rigor of the recommendations. Used alongside the Canadian Diabetes Association Clinical Practice Guidelines 2008 (Canadian Diabetes Association Clinical Practice Guidelines Expert Committee, 2008), the clinician will be able to appropriately work with patients in a culturally appropriate manner. Education of nursing students and practicing nurses alike (as well as other health care professionals) on the guidelines will stress the need for culturally appropriate care to immigrant populations and overall cultural competence. Further research into the realm of transcultural health care could include comparing other models such as the Campinha-Bacote (2002) Model of Cultural Competence with Leininger's Sunrise Model could subsequently broaden the scope of research in this area. Additionally, exploring the concept of cultural safety, which focuses on individual nurses and the attitudes and beliefs they bring into practice, will add to the self-analysis required of any nurse engaging in practice (Ramsden, 1992). Further research in the area of providing culturally competent care to families and communities of immigrant patients with type 2 diabetes could inform the practice of developing diabetes prevention and group education programs.

Recommendations

This project provides guidelines based on qualitative research as a tool to implement culturally appropriate care of an immigrant patient with diabetes. The guidelines are not specific to any particular culture or ethnic group but rather provide a broad basis for working in a culturally appropriate manner. The literature review is limited to articles within the inclusion criteria specified, and therefore do not include quantitative or mixed method design studies. Therefore, it is imperative the guidelines are used in addition to CPGs in the area of diabetes management of the immigrant population. Perhaps one limitation of using Leininger's theory to inform the guidelines is the focus on the individual and family unit rather than factors affecting the cultural community as a whole. Exploring a more holistic perspective, including the various underlying barriers to health care of this marginalized population, will aid the health care provider to also address the larger health inequities resulting from the social determinants of health. Leininger and McFarland (2002) point out that the theory's purpose is ultimately designed to discover what care is, specifically what is "diverse" and "universal" in relation to health, including both emic and etic factors (p. 85). However, if the nurse is not careful, the analysis may lead to generalizations about the population of interest based on the researcher's underlying bias, or it may divert our attention away from the practitioner's underlying racism towards an individual's actions. Therefore, before using this theory, the nurse must first constantly self-examine his/herself for underlying bias and stereotypes. Then the nurse will have a foundation for working alongside the immigrant population with diabetes in a culturally appropriate manner.

Conclusion

Canadian immigrants have fared worse in their health status, as they have an increased risk of morbidity and mortality compared to their Canadian counterparts (Ashton et al., 2003).

These serious disparities in health outcomes need to be addressed, including an assessment of the political, economic, social, historical, and cultural factors that influence health and health care for this vulnerable population. This project seeks to illuminate some of these influences as well as the various ideologies such as ethnocentrism, medicalization, individualism, and neo-liberalism that impact immigrants with type 2 diabetes. Leininger's Theory of Cultural Care Diversity and Universality provides a theoretical lens through which the advanced practice nurse can utilize the three modes of nursing action and decision to provide this population with essential culturally appropriate nursing care.

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*Articles with an asterisk denote their inclusion in the integrated literature review.

Appendix A

Recommendations from the CDA: Management of High Risk Ethnic Populations

1. High-risk ethnic peoples should be screened for diabetes according to clinical practice guidelines [*Grade D, Consensus*]. Ethnic-specific BMI and WC cutoff points should be used for risk stratification [*Grade D, Consensus*]. Where access to screening by a family physician is not available, targeted community screening programs should be provided for those at high risk of diabetes [*Grade D, Consensus*].
2. Community-based prevention and management programs aimed at high-risk ethnic peoples should be developed and delivered in partnership with target communities, and should reflect the local ethnocultural representation. [*Grade D, Consensus*].

(Canadian Diabetes Association Clinical Practice Guidelines Expert Committee, 2008, p. 205)

Appendix B

Inclusion and Exclusion Criteria

Inclusion criteria:

- Published in English
- Qualitative study
- Participants who have type 2 diabetes and who are identified as immigrants
- Published after 1980
- Government documents, if necessary

Exclusion criteria:

- Unpublished manuscripts
- Studies that include type 1 diabetics or gestational diabetics
- Quantitative or mixed method designs
- Evaluation of intervention research

Appendix C

Themes Based on the Sunrise Model: Cultural and Social Structure Dimensions (Leininger, 1988)

1. Technological factors
 - a. None noted.
2. Religious and philosophical factors
 - a. Prayer was used by patients as a mode of dealing with the disease process (Bergland et al., 2007).
 - b. Religious restrictions in relation to food were important to patients (Chowdhury et al., 2000).
3. Kinship and social factors
 - a. Stress related to how the disease had changed their life, yet they still had to carry out their respective roles in their families (especially women as care providers) (Chesla, Chun, & Kwan, 2009; Hadwiger, 2005; Manderson & Kokanovic, 2006; Wallin et al., 2007). Many patients even tried to shield their family from the worry and distress of the disease, trying to live their lives as if nothing has changed (Chun & Chesla, 2004; Hadwiger, 2005; Wallin et al., 2007). In one study, the disease was even described as a challenge to the family harmony (Chesla, Chun, & Kwan, 2009).
 - b. Social isolation led to feelings of loss, inadequacy, and distress (Manderson & Kokanovic, 2006). A bidirectional relationship between emotional health and diabetes exists. Factors around relationship with family and society influenced the relationship between diabetes and emotions (Cherrington et al., 2006).
 - c. Relationships with doctors were considered important, however hierarchical relationships predominated (Kokanovic & Manderson, 2007). Little discussion with doctors about depression occurred (Cherrington et al., 2006). Some participants did not trust their health care provider's opinion (Brown et al., 2007).
 - d. Past history of life in the country they were born, the process of migration, and friends' and families' accounts of diabetes were influential (Brown et al., 2007). Individual suffering was experienced as social suffering (Culhane-Pera et al., 2007).
4. Cultural values and lifeways
 - a. Food and cultural significance of food is an important factor in maintaining quality of life (Chun & Chesla, 2004). Prescribed food challenged cultural food beliefs and practices (Chesla, Chun, & Kwan, 2009). Foods were generally classified as "strong or weak" and "digestible or indigestible" (Chowdhury et al., 2000).
 - b. Illness, diabetes, and health were viewed in a holistic sense (Chun & Chesla, 2004). There was a distinct preference for natural treatments over conventional

treatment (such as pills or insulin) (Brown et al., 2007). Participants incorporated limiting foods, sweating, taking medications, and being calm to restore balance in order to stay healthy (Culhane-Pera et al., 2007).

- c. Exercise and physical activity were seen as negative if too strenuous (Chun & Chesla, 2004).
 - d. Diabetes was viewed in terms of balance and imbalance. Some participants connected the disease with the shared social suffering of refugees living in a country where they did not fit in (Culhane-Pera et al., 2007).
5. Political and legal factors
 - a. Blame focuses on the macro-level of social change and the refugee movement as causation of the diabetes (Culhane-Pera et al., 2007). It was the host country where immigrants discovered they have the disease and feel discriminated against (Hadwiger, 2005).
 6. Economic factors
 - a. Cost of food, particularly different ethnic foods, and their availability was a factor in disease management. As a result, special menu items such as certain meat and sweets were consumed in increased quantities after immigration (Chowdhury et al., 2000).
 - b. Cost of health services, particularly doctor appointments and medications are too costly (Hadwiger, 2005).
 7. Educational factors
 - a. Doctors and other providers do not speak the person's first language (Hadwiger, 2005).

Appendix D

Practice Guidelines to Facilitate Culturally Appropriate Diabetes Care: Results of the Integrated Literature Review

- Cultural concerns for balance and significance of food rituals (religious or otherwise) should be addressed (Chesla et al., 2009; Chowdhury et al., 2000). Recommendations for healthy eating should not be constrained by fixed ethnic stereotypes (Chowdhury et al., 2000).
- Social and cultural context is important to address in terms of facilitating or inhibiting management of diabetes (Chesla et al., 2009; Chun & Chesla, 2004; Hadwiger, 2005; Kokanovic & Manderson, 2006; Manderson & Kokanovic, 2009). Emotional health should be addressed as well as potential depression (Cherrington et al., 2006). Economic and historical contexts should also be explored with patients, in terms of how they are associated with the process of acculturation (Hadwiger, 2005).
- Patients require adequate support to sustain behavior change, and most found this support from others with diabetes (Kokanovic & Manderson, 2006). Therefore addressing support systems the patient may have (or not have) in place is necessary.
- Patients' views and expectations for treatment should be evaluated prior to treatment planning and recommendations (Cherrington et al., 2006; Chun & Chesla, 2004).
- Patients' acculturation levels should be assessed across multiple domains (i.e. language preferences) (Chun & Chesla, 2004).
- Assessment should include how the disease impacts the patient's personal, emotional, and social lives; personal meanings and consequent actions developed around the disease; perceived level of threat to lifestyle and life; limitations and adversities faced by patients (Kokanovic & Manderson, 2007).
- Provide opportunities for patients to describe their personal religious practices as they relate to health (i.e. prayer) (Bergland et al., 2007).
- All patients should be treated individually, but the health professional should have an understanding of the influence of culture on care and disease management (Brown et al., 2007).
- Encouraging cultural awareness of health professionals, improving targeted education, and involving community groups in education are suggestions for improvement from patients (Brown et al., 2007).
- Kleinman's (1980) explanatory models approach may aid in organizing discussion about the disease and discovering common themes (Chun & Chesla, 2004; Culhane-Pera et al., 2007).

Research guidelines:

- Need to develop evidence-based guidelines for diabetes care in ethnic groups with culturally appropriate dietary advice (i.e. fasting during Ramadan) (Wallin et al., 2007).
- Further ethnographic research is necessary to test the strengths and links between gender, community, identity, social roles, and health (Manderson & Kokanovic, 2009).

Appendix E

Qualitative Validity Criteria

- Whittmore et al. (2001) developed an assessment framework to practically critique qualitative studies. I have chosen to use their framework to critique each study in the review by answering the questions of the study.
- The study will receive one point for every question answered. A half point will be awarded if the question is addressed in an incomplete manner.
- No report is excluded based on low score, however a lower score (lower rigor and/or relevance) contributes less to data analysis stage.
- As Leininger (1985) notes, “measurement is not the goal; rather, knowing and understanding the phenomena is the goal. Qualitative validity is concerned with confirming the truth or understandings associated with phenomena” (p. 68).

Assessment of Primary and Secondary Criteria of Validity

Primary Criteria	Assessment
Credibility	Do the results of the research reflect the experience of participants or the context in a believable way?
Authenticity	Does a representation of the emic perspective exhibit awareness to the subtle differences in the voices of all participants?
Criticality	Does the research process demonstrate evidence of critical appraisal?
Integrity	Does the research reflect recursive and repetitive checks of validity as well as a humble presentation of findings?
Secondary Criteria	
Explicitness	Have methodological decisions, interpretations, and investigator biases been addressed?
Vividness	Have thick and faithful descriptions been portrayed with artfulness and clarity?
Creativity	Have imaginative ways of organizing, presenting, and analyzing data been incorporated?
Thoroughness	Do the findings convincingly address the questions posed through completeness and saturation?
Congruence	Are the process and the findings congruent? Do all the themes fit together? Do findings fit into a context outside the study situation?
Sensitivity	Has the investigation been implemented in ways that are sensitive to the nature of human, cultural, and social contexts?

Low score: 1-4; Moderate score: 4-7; High score: 7-10.

(Whittmore, Chase, & Mandle, 2001, p. 534).

Appendix F

Review of Included Studies

Citation	Type of Research/ theoretical underpinning	Methods	Description of methodology	Ethical approval	Themes	Relevance to Nursing Practice	Validity Score (out of 10)
Wallin, Lofvander, & Ahlstrom (2007)	-Qualitative interview study - No theoretical underpinnings discussed	<u>Design:</u> Descriptive, open-ended qualitative interviews with 19 diabetic Somali adults now living in Sweden. <u>Setting and study participants:</u> 19 adults (8 males/11 females) from Somalia diagnosed with diabetes for at least six months from two towns in Sweden and six primary health centers <u>Data sources:</u> Cross cultural face to face interviews with use of interpreters, either tape recorded or with field notes. <u>Data analysis:</u> Taped interviews were transcribed and latent content analysis with interpretative of the meaning of the text, resulting in themes and subthemes. <u>Quality enhancement:</u> One interpreter was included in the analysis of the data to strengthen credibility.	- Cross cultural interviews with the use of an interpreter. Audio-taped or field notes and later transcribed and analyzed into themes and sub-themes.	-Ethical approval obtained. -Oral informed consent obtained.	1. Experience of stress in everyday life. 2. Everyday life continues as before. 3. Comprehensibility gives a feeling of control. 4. Being compliant. 5. Pointed out gender differences.	-Need for development of evidence-based guidelines for diabetes care in ethnic groups (i.e. for fasting during Ramadan). - Culturally appropriate dietary advice.	9.5
Kokanovic & Manderson (2006)	-Qualitative interview study. -No theoretical underpinnings discussed.	<u>Design:</u> In-depth semi-structured interviews. <u>Setting and study participants:</u> 16 1 st generation immigrant women with type	- Cross-cultural interviews with the use of an interpreter or family member.	-Ethical approval was obtained.	1. Some women avoided unwelcome information from their doctors. 2. Social	-Social context is important in facilitating or inhibiting management of	9.5

		<p>2 diabetes (4 from each ethnic group: Chinese, Greek, Indian, Pacific Islander)</p> <p><u>Data sources:</u> Face to face semi-structured interviews (first author conducted the interview) occurred at the participants' choice location, with assistance of a professional interpreter or family member as the interpreter. Field notes were also recorded.</p> <p><u>Data analysis:</u> Interviews were audio-taped and transcribed and both authors read them to identify analytical categories.</p> <p><u>Quality enhancement:</u> Transcripts were coded and analyzed thematically until consensus of themes/subthemes emerged across transcripts. Women's own categories were retained during coding and analysis.</p>	<p>Audio-taped and field notes and later transcribed and analyzed into themes and sub-themes only by the authors.</p>		<p>interactions influenced adjustments to diagnosis and informed communication and adaptation.</p> <p>3. Choice of support varied between ethnic groups. All women found most understanding from others with diabetes.</p>	<p>diabetes.</p> <p>-Difference in attitudes towards family and professionals influenced adherence to advice. This stressed need for appropriate support to women to sustain behavior change.</p>	
<p>Manderson & Kokanovic (2009)</p>	<p>-Qualitative, exploratory, & interview study.</p> <p>-Consultative and flexible approach "rather than formal grounded theory" (p. 24).</p>	<p><u>Design:</u> Extended, open-ended interviews</p> <p><u>Setting and study participants:</u> 30 people involving equal numbers of 4 immigrant groups (Chinese, Greek, Indian, and Pacific Islander), diagnosed with type 2 diabetics for at least 5 years.</p> <p><u>Data sources:</u> Open-ended interviews required participants to "tell about</p>	<p>- Cross-cultural interviews with the use of an interpreter or family member.</p> <p>Audio-taped and field notes and later transcribed and analyzed into themes and sub-themes using Atlas-ti data manager.</p>	<p>-Ethics approval was obtained.</p>	<p>1. Social and cultural losses i.e. inability to meet family expectations of care or community expectations of cultural guidance).</p> <p>2. Diabetes interfered with physical health, wellbeing, and structure of</p>	<p>-Illness experiences are embedded in and impact social worlds of individuals.</p> <p>-Further ethnographic research is necessary to test the strengths/links between gender, community</p>	<p>9</p>

		<p>living with diabetes” in their own words. Interviews were conducted by the author in English, with a professional interpreter or family member.</p> <p><u>Data analysis:</u> Inductive and iterative approach. Interviews were audio-taped and transcribed in English by a research assistant. Atlas-ti data manager was used to code and analyze themes.</p> <p><u>Quality enhancement:</u> Subsequent interviews were informed by the first interviews for interpretive purposes. All authors independently identified themes, constantly refining categories and refining codes.</p>			<p>everyday life.</p> <p>3. Social isolation and unsettled self-identity resulted in feelings of inadequacy, loss and distress.</p> <p>4. Stress was seen as a precursor to diabetes, which influenced their ability to control symptoms.</p>	<p>identity, social roles, and health.</p>	
<p>Chun & Chesla (2004)</p>	<p>-Qualitative study using interpretive phenomenology</p>	<p><u>Design:</u> Extended group semi-structured interviews (2-5 people per group). 2-3 interviews took place with each group.</p> <p><u>Setting and study participants:</u> 16 patient and spouse families with type 2 diabetes who self-identify as Chinese-American.</p> <p><u>Data sources:</u> Interviews were audio-taped and transcribed verbatim.</p> <p><u>Data analysis:</u> Interpretation by the authors: a) review of entire text of each group for holistic themes, b) selection of themes and issues that were discussed within the group, c) detailed</p>	<p>- Cross cultural interviews with the use of an interpreter. Audio-taped and later transcribed and analyzed into themes.</p>	<p>-Ethics approval was not mentioned in the report.</p>	<p>Cultural considerations:</p> <p>1. Conceptualization of diabetes, illness, & health (includes more holistic views).</p> <p>2. Significance and meaning of food (food is an important factor in quality of life).</p> <p>3. Perceptions of Chinese and Western medicine.</p> <p>4. Exercise and physical activity (may be negative if too strenuous).</p>	<p>-Explanatory models of illness or cultural beliefs and attitudes about causes, nature and effects of illness.</p> <p>-Patients’ views and expectations for treatments and recommendations should be evaluated (i.e. including cultural notions of internal homeostasis into plan of care).</p> <p>-Assess patients’ acculturation levels across</p>	<p>8.5</p>

		<p>interpretation of each interview, and marking text that addressed each identified theme. Concrete narratives of care were analyzed by family to identify family context of care and indications of couple dynamics.</p> <p><u>Quality enhancement:</u> Transcription was by Chinese RA and independently checked by another RA.</p>			5. Effects of the disease on family dynamics.	<p>multiple domains (i.e. language preference). -Consider socio-cultural background of patients.</p>	
Chesla, Chun, Kwan (2009)	-Qualitative, interpretive, comparative interview study	<p><u>Design:</u> Multiple semi-structured interviews in individual, group, and couple settings.</p> <p><u>Setting and study participants:</u> 20 foreign-born Chinese American couples (n=40) living with type 2 diabetes</p> <p><u>Data sources:</u> 6 semi-structured interviews with couples. Couples narrated in each other's presence and in group interviews with those who shared their experience as a spouse or patient.</p> <p><u>Data analysis:</u> Audio-taped interviews were translated and transcribed by bilingual staff. Narrative and thematic analyses conducted by a multicultural and multidisciplinary team of nurses and psychologists. All text was coded using Atlas-ti, codes were selected for review that identified challenging situations in</p>	- Cross-cultural interviews with the use of an interpreter. Audio-taped and later transcribed and analyzed into themes. Findings were presented to separate respondent groups of patients and spouses to review the themes presented for accuracy and to add personal variations.	-Ethics approval was not mentioned in the report.	<p>Challenges to diabetes management:</p> <ol style="list-style-type: none"> 1. Diabetes symptoms challenged family harmony. 2. Dietary prescriptions challenged food beliefs and practices. 3. Disease management requirements challenged established family role responsibilities. 	<p>-Attentiveness to social context of disease management. Decisions are seldom made independently of concerns for family well-being, family face, and responsibility required by family roles. -Disease recommendations should include cultural concerns for balance and significance of food rituals.</p>	9.5

		<p>diabetes management by patients and spouses. <u>Quality enhancement:</u> A group of 19 patients and spouses reviewed and confirmed the themes developed from the initial couples. Each audio file was checked for accuracy by a separate bilingual staff member who conducted the interview.</p>					
<p>Kokanovic & Manderson (2007)</p>	<p>-Qualitative research study. - No theoretical underpinnings mentioned.</p>	<p><u>Design:</u> In-depth semi-structured interviews conducted by the authors with interpreters, as required. <u>Setting and study participants:</u> 32 first generation immigrant patients with type 2 diabetes living in Australia (16 males, 16 females-- 8 Chinese, 8 Indian, 8 Pacific Island, 8 Greek). <u>Data sources:</u> One-on-one in-depth interviews were developed to gather information about specific topics related to diabetes management and lifestyle. <u>Data analysis:</u> Data analysis with Mays and Pope's framework of qualitative research and analysis of health care by the authors. <u>Quality enhancement:</u> Transcripts were coded independently by the authors and then discussed themes and made decisions about</p>	<p>- Cross-cultural interviews with the use of an interpreter. Audio-taped and later transcribed and analyzed into themes independently by each author. Later themes were discussed and coded until consensus was reached.</p>	<p>-Ethics approval was obtained.</p>	<p>1. Doctor-patient relationships were considered important (time and empathy was considered important). However, hierarchical relationships dominated. 2. Communication process related to diagnosis of disease (generally two different reactions: one is shock and disbelief, the other a validation of their poor health).</p>	<p>- Multiple factors need to be addressed clinically to prevent complications: -how the disease impacts the patient's personal, emotional, and social lives, personal meanings and consequent actions developed around the disease -perceived level of threat to lifestyle and life -limitations and adversities faced by patients.</p>	<p>7.5</p>

		dominant and emergent categories.					
Bergland, Heuer, & Lausch (2007)	-Qualitative, exploratory research study. - No theoretical underpinnings mentioned.	<u>Design:</u> Semi-structured interviews regarding practice of religion and prayer. <u>Setting and study participants:</u> 18 Hispanic (originally from Mexico) farm workers with type 2 diabetes. <u>Data sources:</u> 2 interviews with each participant conducted one year apart by trained interviewers with an interpreter, if necessary. <u>Data analysis:</u> Interviews were taped and transcribed in English. Responses about prayer were formulated into concepts and meanings which led to identification of 3 major themes. <u>Quality enhancement:</u> All participant responses relating to prayer were extracted by one researcher and confirmed by 2 other researchers.	- Cross-cultural interviews with the use of an interpreter. Audio-taped and later transcribed and analyzed into themes independently by each author.	-Ethics approval was obtained. Informed consent was obtained from each participant	1. They used prayer in their daily lives. 2. Prayed for themselves and their families. 3. Recited prayers specifically for their diabetes.	-Ask questions about religion and prayer as it pertains to the patients' daily life. -Provide the opportunity for patients to describe their personal religious practices as they relate to health. -Allow patients to have religious items in their rooms in hospital. - Encourage prayer with patients and families as appropriate.	9
Chowdhury, Helman, & Greenhalgh (2000)	-Qualitative research study -No theoretical underpinning presented.	<u>Design:</u> Unstructured narrative interviews conducted by one of the authors. <u>Setting and study participants:</u> 40 1 st generation British Bangladeshis with type II diabetes. <u>Data sources:</u> Narrative interview in which the participant told their story of how diabetes affects them, pile-sorting of food items, &	- Cross-cultural interviews with the use of an interpreter. Food classification and observation in the participant's home. Audio-taped and later transcribed and analyzed into themes.	-Ethics approval was not mentioned in the report.	1. Strong religious restrictions on particular food items (i.e. pork). 2. Ethnic customs based on availability and affordability of foods. 3. Immigration included increase in quantity of "special menu" items (i.e.	-Non-Western ethnic groups may have a strong belief in the health potential of particular food choices. -Religious injunctions have overriding significance for the food choices of many cultural	9.5

participant observation of meals.
Data analysis: Interviews were audio-taped and data was analyzed using NUDIST computer software for analysis of non-numeric unstructured data, and responses grouped under themes.
Quality enhancement: Focus groups with participants were held in a second round to validate constructs. There was a high degree of consistency between individual responses and group discussions.

meat and sweets).
 4. Foods were classified in terms of “strong or weak” and “digestible or indigestible”.

and ethnic groups.
 -Foods of equivalent nutritional content should not be assumed to be interchangeable in the eyes of the patient.
 -Ethnic customs in raw ingredients and cooking methods are retained to a high degree on migration.
 -Food classifications based on the traditional concept of balance may have positive implications for health education.
 -Recommendations for healthy eating should not be constrained by fixed ethnic stereotypes.

<p>Cherrington, Ayala, Sleath, & Corbie-Smith (2006)</p>	<p>-Qualitative study with focus group design -Informed by the health belief model and social cognitive theory.</p>	<p><u>Design:</u> Eight 90 minute focus groups were held over a period of one year. <u>Setting and study participants:</u> 45 self-identified Latino adults with type II diabetes, mostly from Mexico originally and now living in North Carolina.</p>	<p>-Focus groups in Spanish with use of moderator and note taker over the course of one year.</p>	<p>-Ethics approval was obtained. Informed consent was provided from each participant</p>	<p>-Bidirectional relationship between emotional health and diabetes. (i.e. diagnosis of diabetes led to feelings of hopelessness and worry, while</p>	<p>-Emotional health and diabetes are closely associated in minds of these Latino adults. -Emotional health and specifically depression should be discussed by</p>	<p>10</p>
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44% were male.

Data sources: Focus groups were conducted by a bilingual, bicultural woman. A semi-structured moderator's guide addressed topics related to diabetes and depression. The first 60 minutes of the group addressed these questions, whereas the last 30 minutes were set aside for group discussion.

Data analysis: Each focus group was audio-taped and transcribed. A note taker was also present to take field notes. Analysis using STATA 8.0. Authors used a combined inductive/deductive approach to coding data into themes independently, then met together and discussed until consensus was reached. After the 7th group, no new themes were identified. Codes were imported into Atlas-ti for analysis.

Quality enhancement: A pilot study revealed some questions needed to be changed to bridge topics more evenly. Field notes were taken about nonverbal behaviors and level of engagement on various topics. Moderator's guide was translated and back-translated to verify content.

difficulty with management of diabetes led to depression and anxiety).
 -Family and societal factors influenced the relationship between diabetes and emotions.
 -Little discussion of depression with health care providers occurred.

primary care team with Latinos with diabetes.
 -Important to elicit beliefs and preferences about treatment options for both diabetes and depression.

Brown, Avis, & Hubbard (2007)	-Qualitative research study using one-on-one interviews.	<p><u>Design:</u> Qualitative in-depth interviews between 45-90 minutes long.</p> <p><u>Setting and study participants:</u> Inner city Nottingham residents from 2003-2004. 16 African-Caribbean people with type II diabetes.</p> <p><u>Data sources:</u> Semi-structured in-depth interviews took place. Field notes and a reflective diary were kept.</p> <p><u>Data analysis:</u> Audio-taped interviews were transcribed. Transcripts were analyzed for emergent themes. Data was managed using NVivo software.</p> <p><u>Quality enhancement:</u> Validity was checked by an independent researcher and through discussion with a local community group. Interview was piloted by the first interviewee and not significantly changed afterwards. Recruitment continued until no new information was found during analysis.</p>	-Purposeful sample of 16 participants took part in a one-on-one semi-structured interview.	-Ethics approval and informed consent was obtained.	<p>-Participants were strongly influenced by: growing up in the Caribbean, migration to the UK, and friends' and families' accounts of diabetes, as well as their own experiences.</p> <p>-Mistrust of advice from health care providers.</p> <p>-Preference for natural treatments.</p> <p>-Insulin treatments were feared, and diet- or tablet-controlled diabetes was seen by some as milder and did not warrant concern.</p> <p>-Knowledge and understanding of diabetes was poor.</p>	<p>-Health professionals should treat all their patients individually, but have an understanding of the influence of culture.</p> <p>-Participants suggested: involving local community groups, improving targeted education, and raising cultural awareness in health professionals.</p>	10
Culhane-Pera, Her, & Her (2007)	<p>-Qualitative research study involving group interviews</p> <p>-Grounded theory approach.</p>	<p><u>Design:</u> Each of 3 groups met 7 times over 13 months, for 1.5-2 hours each time.</p> <p><u>Setting and study participants:</u> 39 Hmong adults with type II diabetes.</p> <p><u>Data sources:</u> Of 21 discussions: 2 verbatim notes</p>	-Focus group discussions with the use of an interpreter.	-Ethical approval and informed consent were obtained.	<p>-Shared cultural model of diabetes involves a view of diabetes in terms of balance and imbalance.</p> <p>-This connects personal bodily</p>	<p>-Kleinman's (1980) explanatory model's (EM) approach aids in organizing people's discussion about</p>	9

		<p>were available and 18 audiotapes. A researcher transcribed and translated the tapes.</p> <p><u>Data analysis:</u> The principal investigator reviewed the translations and discussed with another researcher. N6 qualitative research program was used. Another researcher joined the analysis team and together with the themes identified they created a cultural model.</p> <p><u>Quality enhancement:</u> Findings were discussed with a Hmong traditional healer and group visit participants. Field notes and ideas from the group discussions were added to the analyses.</p>			<p>experiences of diabetes with a traditional cultural model of balance, and shared social suffering of refugees living in a country where they do not fit in.</p> <p>-Limiting foods, sweating, taking medications, and being calm can restore balance and help them stay healthy.</p> <p>-Hmong model focuses blame at the macro-level of social change and refugee movement as the causation of diabetes.</p> <p>-Individual suffering is experienced as social suffering.</p>	<p>their diseases and discovering common themes that fit into a model for diabetes.</p> <p>-Using a similar cultural model with Hmong people with diabetes, could provide healthcare workers with a deeper understanding of patients' experiences.</p>	
Hadwiger (2005)	<p>-Qualitative research study</p> <p>-Berry's (1980) model for acculturation was used as a conceptual framework.</p>	<p><u>Design:</u> Formal interviews with each informant at the informant's home. Two case study participants were chosen and were visited weekly for 10 weeks.</p> <p><u>Setting and study participants:</u> 10 adult, Mexican immigrants living in the Midwestern USA with type II diabetes.</p> <p><u>Data sources:</u> 10 formal interviews took place and</p>	<p>-Ethnographic methodology involving formal interviews (10), participant observation, and case studies (2).</p>	<p>-Informed consent was obtained through a Spanish consent form. Ethics approval was not mentioned in the report.</p>	<p>Individual decisions of cultural identity:</p> <ol style="list-style-type: none"> 1. Women are primary caregivers. 2. I don't have any serious problems. 3. I can care for myself. 4. The care in Mexico or the place from where I came. <p>Conditions</p>	<p>-Cultural, economic, social and historical contexts associated with the process of acculturation need to be addressed.</p>	10

were audio-taped. The interviewer followed a question guide during the interview. Journal entries were maintained immediately after each interview by research team members.

Data analysis: Tape recordings were transcribed verbatim in English and Spanish. These progressed through coding, development of categories, and clustering into themes.

Quality enhancement: The interview guide was tested during training sessions for research assistants and minor revisions were made based on common language use within the community.

Transcripts were reviewed by a bilingual bicultural speech pathologist to monitor quality of translations and process of data analysis. Confirmation visits were made with most of the informants.

controlled by host society:

1. I discovered here that I have diabetes.
2. Services of doctors and medications are too costly.
3. The doctors don't speak Spanish.
4. They have discrimination against me.