

2019

The Experience of Older Homeless Females with Type 2 Diabetes

Joan Jacqueline Downes
Walden University

Follow this and additional works at: <https://scholarworks.waldenu.edu/dissertations>

 Part of the [Public Health Education and Promotion Commons](#), and the [Social Work Commons](#)

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

Joan Downes

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee

Dr. Mary Bold, Committee Chairperson, Human Services Faculty
Dr. Lillian Chenoweth, Committee Member, Human Services Faculty
Dr. Tina Jaeckle, University Reviewer, Human Services Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
2019

Abstract

The Experience of Older Homeless Females with Type 2 Diabetes

by

Joan Downes

MA, Walden University, 2015

BS, University of Phoenix, 2012

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Human Services

Walden University

February 9, 2019

Abstract

The purpose of this phenomenological study was to explore the experience of older homeless females who have type 2 diabetes mellitus. Women who have stable housing often find it difficult to manage their diabetes; for those who are homeless, managing the disease is even more difficult. This chronic disease has impacted people all over the world and decreased their quality of life. However, people who are homeless may be at a higher risk of this stressful illness. Managing glycemic levels is a crucial factor in decreasing the adverse results in type 2 diabetes. In this study, face-to-face interviews were conducted with flyers from 15 participants between the age of 55 and 64 years who have type 2 diabetes. The participants shared their experiences of how they managed and monitored type 2 diabetes. The qualitative analytics in this study showed that the implementation of a secure storage area for diabetic medications is needed in shelter environments. The administration of insulin injection is essential, and needles should be allowed and stored appropriately in a locked cupboard or cabinet at the shelter. The 15-participants reported that the lack of a permanent address reduces their chance to access health insurance and other social benefits. The implementation of an emergency mailing program and modified interventions could meet the needs of older homeless women with diabetes and lead to a positive social change that would improve long-term care for these women. Therefore, the findings of this study show the need for new knowledge and social change that benefits the participants, the entire community, neighboring communities, and anyone who is struggling with type 2 diabetes.

The Experience of Older Homeless Females with Type 2 Diabetes

by

Joan Downes

MA, Walden University, 2015

BS, University of Phoenix, 2012

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Human Services

Walden University

February 9, 2019

Dedication

I would like to dedicate this dissertation to the Almighty God, who is the king of kings and the conquering lion in all creations. I would also like to dedicate this academic journey to my late father, who has always instilled in me since I was a child that education is the key to get out of poverty. Gone but not forgotten my Father. I will forever remember your support, love, and inspiration that has pushed me through the difficult and challenging times. I would like to reach out and thank my family for understanding my circumstances, supporting and loving me even though I was not always around physically but they know that they are ever in my thoughts and prayers. Last but not least, I want to say many thanks to the faculty members who have dedicated their time and expertise to help me in completing this extraordinary journey in my life. Thank you all so very much.

Acknowledgments

I would like to take this opportunity to acknowledge my chair, Dr. Mary Bold and my committee member, Dr. Lillian Chenoweth. Dr. Bold has been a supportive supervisor in this program and has worked diligently to foster the sincerity of Walden University. Dr. Bold's expertise and professionalism have been truly appreciated. Dr. Chenoweth has been valid in this journey. I am gracious for her willingness and time to assist in this process. I want to express my deepest gratitude to Chief Academic Officer the department head for helping to make this journey become a reality. I want to humbly thank all the faculty members for their contribution of knowledge shared during my journey.

Finally, I would like to acknowledge my entire family who have supported and encouraged me throughout this exciting and challenging experience.

Table of Contents

List of Tables	v
Chapter 1: Introduction to the Study.....	1
Introduction.....	1
Background of the Study	2
Problem Statement	5
Purpose of the Study	8
Research Questions	9
Theoretical Framework.....	9
Nature of the Study	11
Definitions.....	13
Assumptions.....	14
Scope and Delimitations	15
Limitation.....	15
Significance of the Study	16
Summary	18
Chapter 2: Literature Review	19
Introduction.....	19
Literature Search Strategy.....	20
Theoretical Framework.....	20
Homelessness	22
Integrating Factors Leading to Homelessness	26

Women Close to Retirement Age	30
Diabetes Mellitus	31
Risks Factors Related to Diabetes.....	34
High Blood Pressure.....	38
Coping with Diabetes.....	39
Modifiable Diet and Lifestyle.....	44
Diabetes Self-Care Education.....	48
Social Support and Diabetes.....	51
Overview of Recent Studies.....	53
Summary.....	54
Chapter 3: Research Method.....	56
Introduction.....	56
Research Design and Rationale	56
Research Questions.....	58
Role of the Researcher	59
Sample Size and Eligibility Criteria	60
Data Collection	62
Protection of the Human Subjects.....	64
Confidentiality	64
Trustworthy.....	65
Validity.....	66
Transferability and Confirmability	67

Qualitative Analysis.....	68
Summary.....	69
Chapter 4: Results.....	70
Introduction.....	70
Setting.....	70
Demographics.....	71
Themes.....	73
Experience.....	75
Manage/Cope.....	82
Communication.....	88
Self-Care.....	92
Education.....	97
Improvement.....	101
Motivation.....	106
Barrier.....	110
Summary.....	114
Chapter 5: Discussion, Conclusions, and Recommendations.....	116
Introduction.....	116
Interpretation of the Findings.....	117
Experience.....	117
Manage/Cope.....	119
Communication.....	120

Self-Care	121
Education	122
Improvement	1253
Motivation.....	125
Barrier.....	125
Limitations of the Study.....	126
Recommendations.....	127
Implications for Social Change.....	129
Conclusion	130
References.....	133
Appendix A: Flyer	150
Appendix B: Interview Protocol	151

List of Tables

Table 1. Demographics of Participants72

Table 2. Nodes Created From Transcripts That Lead to Themes74

Chapter 1: Introduction to the Study

Introduction

The Center for Disease Control and Prevention (2016a) reported that 86 million Americans are prediabetic, which equates to 1 in 3 adults in the United States. Alpert (2016) explained that prediabetes is an elevation in fasting plasma glucose level higher than 100 mg/dl, and that diabetes is marked by a glucose tolerance test higher than 200mg/dl. Diabetes is a condition that causes the human body to fail from properly using and storing glucose because the body does not produce sufficient insulin, it is called insulin resistance (American Diabetes Association, 2014). Type 2 diabetes is a common form of diabetes, and the progression of this chronic disease is fostered by aging, genetics, and, lifestyle (American Diabetes Association, 2016). Over time, type 2 diabetes can lead to damage of the eyes, kidneys, nerves, and heart (American Diabetes Association, 2016).

Type 2 diabetes impacts people in many different ways. Some people can monitor and keep their glycemic level in control, while others struggle to do so. Type 2 diabetes disease can cause complications that impact an individual's life and decrease the quality of health. Although a person is faced with a chronic illness, the individual must carry on with their daily routine while adapting to the changes caused by the disease. Type 2 diabetes can be a stressful illness that necessitates many changes and lifestyle reorganization to assist in coping with the disease. Homelessness also has a severe effect on a person's health and life. According to the Center for Disease Control and Prevention (CDC, 2016a), individuals who are homeless are at higher risk of chronic

illness. The public health needs of the homeless population can be addressed through the collaboration and integrated efforts of community organizations, health care providers, and social service agencies (CDC, 2016a). The benefit of a stable and safe shelter for health is crucial, but poverty affects some 43 million Americans. Unaffordable housing increases the risk of homelessness and poor quality of health outcomes (CDC, 2016b).

In this study, I explored the experience of older homeless women who have diabetes. People who have stable housing often have trouble coping and maintaining their glycemic levels. In this study, I explored how women who are homeless master management of glucose without adequate shelter. Study findings could result in the development of new policy or interventions that would promote healthy living and lifestyles for people who are homeless. The new information gathered in this study may be used by health care teams which includes clinicians, educators, and persons with diabetes to encourage awareness and practice healthy choices. The first chapter of this dissertation introduces the topic and explains the need for the study. In it, I describe the background, problem, purpose of this research, research questions and sub-questions, conceptual framework, nature of the study, terms used, assumptions, scope and delimitations, limitations, the significance of the study.

Background of the Study

Many researchers have focused on the difficulties associated with managing and controlling diabetes. The complication of type 2 diabetes can cause mental health issues and lead to a dramatic decrease in the quality of life (Narayan & Weber, 2015). Kelly et al. (2016) evaluated the need to control diabetes and hypertension as they relate to aging.

The researchers reported that people's health was influenced by the health care system and how they obtain treatment in the areas where they live. Recent reports confirm that 100 million American adults are living with diabetes or prediabetes (CDC, 2017). Low quality of life, heart disease, and mental health are just some of the complications of diabetes. Narayan and Weber (2015) explained that Americans spend approximately \$245 billion per year on diabetes, including the \$176 billion from direct medical costs.

There are some positive signs of improvement in the quality of diabetes care in the United States (Narayan & Weber, 2015). However, Narayan and Weber (2015) reported that the residual rate is still at a high level because the number of individuals with diabetes-related issues continues to rise. The situation is a serious concern, especially given that one in every five health care dollars is going to diabetes treatment to care for persons with diabetes (Narayan & Weber, 2015). The prevalence of type 2 diabetes indicates that diabetes prevention should be a top priority. Even the slightest decrease in chronic diseases like diabetes could have a significant impact on the future prevalence of this illness (Narayan & Weber, 2015).

Diabetes has a greater prevalence in ethnic minority populations and among those from lower socioeconomic status (De Groot, Golden, & Wagner, 2016). People with diabetes often have to rely on themselves to manage their glycemic control (De Groot et al., 2016). De Groot et al. (2016) mentioned that self-medical management alone can be difficult for the individual. Johnson and Marrero (2016) stated that disease prevention through improving people's lifestyle behaviors is often ignored by healthcare providers who instead emphasize biomedical tests and treatment once the chronic disease is

established. Type 2 diabetes is characterized by the body not being able to efficiently metabolize food, which leads to elevated blood glucose (Johnson & Marrero, 2016).

According to Johnson and Marrero, diabetes is the seventh leading cause of death, and it is one of the leading causes of blindness as well as amputation of the lower extremities.

Providers and public health workers use the chronic care model as it sees the patient in both the community and medical context. The model includes self-management support in which the patient is seen as an active member of the care team who acquires the skills and is confident to manage his or her disease (Johnson & Marrero, 2016). This evidence-based practice encourages clinicians to integrate decision support into their daily practice of healthcare (Johnson & Marrero, 2016). The model also promotes empathy and builds professional relationships between diabetes outpatients and clinicians. This connection in the community may improve disease prevention and support self-care management, leading to better health results for people with diabetes (Johnson & Marrero, 2016).

The CDC (2016a) reported that an individual who is 45 years of age or older is likely to develop type 2 diabetes if he or she has a family history of diabetes. Being overweight due to lack of physical activity, race, and health issues like high blood pressure are factors contributing to diabetes (CDC, 2016a). The CDC report also stated that an individual may develop type 2 diabetes if the person has prediabetes. Many populations are at risk of type 2 diabetes, but in this study I focused on the experience of older females who are homeless and between 55 and 64 years old. The World Health Organization (WHO, 2017) explained that the aging process is a biological reality which

is unique and beyond human control. Retirement age is 60 or 65 years old in most developed countries (WHO, 2017). In the developed world, chronological time plays a paramount role (WHO, 2017). I selected the age range of 55 to 64 years old because it is linked to retirement age and is a historical milestone that signifies the life stage in the developed world when active employment is almost ended for the individual (2017).

The gap in the knowledge related to type 2 diabetes is that insufficient education and preventative awareness is not available to the homeless population. In this research, I explored the lived experiences of older homeless women to understand and address their need to develop self-management care. The study findings may be significant in helping to develop awareness and encouraging communities to promote education about diabetes. The information can be presented to people in its simplest form to provide a clear understanding of how they can adapt the skills to care for their diabetes. The study is needed because it could help the community to understand diabetes and how to control the disease.

Problem Statement

Type 2 diabetes can cause complications such as cardiovascular disease, amputations of the limbs, and kidney and eye diseases, thus reducing the quality of life if it is not adequately treated (Kelly et al., 2016; Narayan & Weber, 2015). Older women who are homeless with type 2 diabetes are often not educated enough about the importance of managing and controlling glycemic levels (Gonzalez, Shreck, Psaros, & Safren, 2015). Few studies have addressed the health care characteristics of homeless

women with type 2 diabetes. The dangers of type 2 diabetes require an investigation of how older homeless women experience and manage this chronic disease.

Type 1 diabetes is most common in young adults, and types 2 diabetes affects older people because it develops over many years (CDC, 2016a). Evidence spanning two decades has indicated that comorbid diabetes predicts negative results for depression and other internalized concerns like panic disorder and anxiety (Andrews et al., 2016). In a first of its kind study, Andrews et al. (2016) compared people with diabetes and people without diabetes to see how they responded to integrated behavioral healthcare treatment. The treatment consisted of mental health professionals working along with primary care clinicians to provide interventions based on cognitive behavioral therapy (Andrews et al., 2016). The psychosocial treatment showed that the people who have diabetes did not improve and the rate of significance was lower compared to the people without diabetes (Andrews et al., 2016), Andrews et al. found that people with diabetes could also experience not only obvious concerns, but also internalize concerns as well.

Older women who are homeless face many challenges including material deprivation. Castellow, Kloos, and Townley (2015) explained that homelessness is a traumatic experience. The ability to have a safe place and privacy for sleep time could be critical and become a barrier for the homeless women. Homelessness is a significant problem across the Commonwealth of Pennsylvania because of the overcrowded shelters that are poorly supervised. According to the Housing Alliance of Pennsylvania (2016), approximately 16,200 Pennsylvanians are homeless on any given day of the year. The environmental factors vary, as affordable housing and homelessness have an intricate

link. A primary cause of homelessness in the United States is the lack of affordable housing, which has led to a steady increase in the median age of homeless people in the state (Housing Alliance of Pennsylvania, 2016).

Almost half of the homeless single adults are over 50 years old. The Corporation for Supportive Housing (2016) reported that the number of vulnerable elders who are homeless could double by the year 2050. Poor living conditions foster behavioral health challenges because they create limited access to preventative health care. Older homeless women have a unique set of needs, and living unsheltered leads to decreasing health (Corporation for Supportive Housing, 2016). Homeless women struggle to manage co-occurring chronic illnesses, like type 2 diabetes, while geriatric conditions set in due to aging (CSH, 2016). The CDC (2016a) suggested that some of the risk factors for type 2 diabetes include older age, obesity, family history of diabetes, and physical inactivity. Diabetes management requires self-care skills but social and environmental factors put a heavy burden on an individual as well as their families (De Groot et al., 2016). The populations at highest risk for diabetes include people from low socioeconomic backgrounds and those experiencing environmental exposures such as poverty and stress (De Groot et al., 2016). These exposures can lead to an increased risk of mental illness as it interferes with self-care and may compromise medication management.

De Groot et al. (2016) reported that there is minimal literature on depression screening and treatment intervention for seniors with type 2 diabetes. Women with longer duration of diabetes and others with multiple medical conditions are at a higher

risk of anxiety disorder. Evidence shows that anxiety disorder is highly persistent in people with diabetes (De Groot et al., 2016).

The United States continues to face a significant social challenge of homelessness. According to the Annual Homeless Assessment (Housing Urban Development, 2017), 553,742 people experienced homelessness on a single night in January 2017. With this information, it is clear that homelessness is more prevalent in the United States than any of the leading causes of death (Parker & Dykema, 2013). Despite the intricate link to public health, there is no national health-based campaign against homelessness. The social challenge of homelessness has not been clearly identified as a health problem. Nevertheless, it is both an etiologic factor and results in health issues (Parker & Dykema, 2013). Homeless persons are susceptible to comorbid conditions, poor health results, and decreased access to medical care compared to other population subgroups (Parker & Dykema, 2013). A cumulative effect of errors and delays in care could have a negative impact on a homeless person (Parker & Dykema, 2013). Using a phenomenological approach offered me a stage to explore and examine the lived experience of the older homeless women with type 2 diabetes.

Purpose of the Study

The goal of this qualitative study was to explore and understand the experiences of older women with type 2 diabetes who are homeless. Diabetes is a chronic disease that can affect anyone, and if not properly treated can cause complications that decrease the quality of life (Kelly, et al., 2016; Narayan & Weber, 2015). I conducted extensive

interviews with the intention of gathering information and developing an understanding of each individual perception.

Research Questions

RQ1: What is the experience of the older homeless women with type 2 diabetes in an environment of a shelter or homeless campsite?

RQ2: What kind of support do the homeless women have from clinicians through their lived experience in a shelter or campsite?

RQ3: How do the women describe their barriers encountered when they seek care in the community?

Theoretical Framework

A previous study has shown that diabetes is a chronic disease that continues to rise in the United States (Gonzales, Tanenbaum, & Commissariat, 2016). The treatment of diabetes can be costly and burdensome not only to the individual with diabetes, but also the health care system. Few studies have explored the experience of older women who are homeless and have diabetes. Although treatment and glucose control is effective, people still have difficulties with the management of self-care (Gonzales et al., 2016). I used Bronfenbrenner's (1979) ecological system theory as a framework to process the underlying experience of older women who are homeless with this chronic disease. Bronfenbrenner (1979) theorized the microsystem as the pattern of activities where social roles and the interpersonal relations are encountered in face-to-face settings. The development and improvement of diabetes regimen compliance require an in-depth

understanding of the barriers that prevent women from complying. Gonzales et al. (2016) explained that long-term medication usage and lifestyle changes are essential to managing type 2 diabetes. To achieve glycemic control, the individual is required to adopt a different behavioral pattern such as taking multiple medications, changing diet, maintaining foot care, frequently visiting with healthcare providers, and monitoring blood glucose (Gonzales et al., 2016).

Bronfenbrenner (1979) reported that individuals develop through interactions in their environment and urged researchers to study the settings in which the individual spends time as well as the relations with others in the same configuration. The characteristics of homeless women and others that they interact with develop over time. The ecological system theory offers a framework to examine human development past, present, and future (Bronfenbrenner, 1979). The microsystem is the setting in which the person lives (Bronfenbrenner, 1979).

I further explored the study topic through the phenomenological theory of Moustakas (1994), which I used to describe the experiences of the participants in their environmental essence. Moustakas explained that what appears in consciousness is precisely what the reality is while it appears to the world as a product of learning. I examined the experiences of homeless women to see how they manage type 2 diabetes. Specifically, I explored the barriers that the homeless women perceived was explored, using the phenomenological approach to intentionally combine the outward appearance of the experience and participant's view. In Chapter 2 I explained the theoretical framework.

Nature of the Study

This qualitative, phenomenological study, I explored the experiences of older homeless women with type 2 diabetes. The participants were older females who are homeless, who I recruited from the shelters for women in one county. Researchers use phenomenological inquiry to understand human experience as they explore a phenomenon (Moustakas, 1994). Phenomenology offers a method for exploring and describing shared experiences related to an event (Moustakas, 1994). This particular tool helped me put aside my biases and focus on participants' experiences. The systematic procedure is rigorous, accessible, and useful for identifying significant statements associated with responses to open-ended questions (Moustakas, 1994). I interviewed homeless women with type 2 diabetes using open-ended questions. This approach allowed the women to share their experiences. The open-ended question format was designed as part of an in-depth interviewing process that I used to explain the experiences of the homeless women, ages 55 to 64 years old, with type 2 diabetes. This methodology was useful for exploring the topic and explaining the phenomenon among the selected population (Yin, 2012).

I utilized a phenomenological theory to focus firmly on views of the participants and not that of the investigator (Moustakas, 1994). I conducted interviews to gain a deeper understanding of these women's lived experiences. The study method was face-to-face interviews directed by the topic and themes chosen by me to convey in the manner of open-ended questioning in a conversation. Data for this study was collected through audio recording and note taking with pen and paper to ensure nothing was missed

or misinterpreted. Yin (2012) suggested that case study plays an essential role in social science inquiry. I drew upon the women's empathy, experiences, intuitions, and emotions to demonstrate an in-depth understanding of their lived experience with diabetes. The same questions were presented in the same manner to all the participants to obtain their views on the social issue.

According to Brennen (2013), both qualitative and quantitative researchers like to create mental maps and models to assist them in representing their philosophical worldviews. The mental maps are known as paradigms that provide a set of views and beliefs that the researchers use to direct their studies (Brenner, 2013). The qualitative analysis involves language, nonverbal behaviors, and observations in the interviews that could reveal a deeper meaning of the underlying issue which might yield to an action plan for change (VanderStoep & Johnson, 2009).

Interviews may provide researchers an atmosphere to build rapport, acceptance, and respect to promote dignity of the participants and their experiences (VanderStoep & Johnson, 2009). Moustakas (1994) principles served as a guideline throughout the study for suspending biases and focusing on participants' descriptions of their experiences. The phenomenological approach assisted me in connecting the participant's experience with mine, allowing everyone in the study to have the same understanding of the phenomenon from a different perspective (see Moustakas, 1994).

Definitions

Burden: Something that can weigh or hamper a person down causing difficulty.

Blood glucose: The sugar found in the blood that is a primary source of energy in the body (American Diabetes Association, 2014).

Coping: A process of constant change in behavioral efforts to manage demands internal and external (Lazarus & Folkman, 1984).

Diabetes mellitus type 2: The glucose tolerance test higher than 200mg/dL is categorized as diabetes (Alpert, 2016).

Experience: Feelings of the perceiver or observer; an event happening.

Glucose: A simple form of sugar which is broken down in the body (American Diabetes Association, 2014).

Health literacy: The level to which a person can obtain, process, understand, and communicate about health-related information to make an informed health decision (Berkman, Davis, & McCormack, 2010).

Homeless individual: An individual who is without permanent housing and who may live in the streets, stay in a shelter, single room occupancy facilities, abandoned building or vehicle (National Health Care for the Homeless, 2016).

Hypoglycemia: A condition of an individual with lower blood glucose than normal, leading to unconsciousness because of hunger, light-headedness, sleepiness and confusion (American Diabetes Association, 2014).

Hyperglycemia: Term for higher blood glucose in the body, where the body cannot make sufficient or use glucose properly (American Diabetes Association, 2014).

Prevention: To intervene early and create an environment to support an adaptive behavior pattern (Kamps & Tankersley, 1996).

Social environment: Interaction activity with neighbors to provide support and create a change that could affect a person.

Self-management: The engagement in self-care tasks that may relate to medical, physical, and emotional management of oneself and their health condition (McCorkle et al., 2011).

Support: An act of helping a person; provision of assistance or backing (Oxford English Dictionary, 2017).

Assumptions

In this study, I focused on the experience of the homeless women with type 2 diabetes who were age 55 through 64 . In the study, I assumed the following:

1. The participants would be cooperating as part of the study.
2. The homeless women would answer all the interview questions to the best of their knowledge.
3. This study would help to improve awareness about the official clinical diagnosis of diabetes.
4. The information collected would be sufficient to reveal an in-depth understanding of what the women are experiencing with the chronic disease of type 2 diabetes.

The assumptions were relevant to the study because I sought to capture the experience of the participants who shared their stories to exemplify the barriers and obstacles.

Scope and Delimitations

I conducted the study only in the shelters for women and families in the northern part of Pennsylvania. The shelters were selected because they are in the surrounding areas of my community. I chose the shelters for women and families knowing that there are single women with children living in this institution. Most of these women work with job agencies that provide temporary employment, which could lead to permanent employment based on their job performances. The shelters for homeless men, other minority sub-group populations, and the general population in other states and region of the United States were excluded from the study because of safety, health factors, and the different social and economic factors. A small sample of homeless women was identified to explore their experiences. This study did not address depression, mental illness, and other psychological disorder that can affect people with diabetes. In this study, I also delimited the sample population based on a specific age range of 55 and not older than 64 years old.

Limitation

The limitation in the outcomes of this study is that they are not generalizable. As a qualitative study, the sample size was small. Results cannot be assumed to represent any population beyond the participants under study. I did not focus on street

homelessness in this study, which may have resulted in a limitation based on the availability of variables.

Significance of the Study

Burns, Deschenes, and Schnitz (2016) found that people with type 2 diabetes are at a higher risk of developing mental health problems. De Groot et al. (2016) stated that an adult with diabetes is more susceptible to anxiety disorder when compared to others without diabetes. The evidence demonstrated that anxiety disorder was highly persistent in persons with diabetes (De Groot et al., 2016). Loneliness, not having social support of friends or families, is a primary barrier to the coping regimens associated with type 2 diabetes. Wiebe, Helgeson, and Berg (2016) explained that societal complication and economic factors could develop barriers to effective diabetes management.

This study could lead to positive social change as I aimed to contribute to the community and across the country. The information provided may guide the process of self-management to help anyone with diabetes in monitoring and controlling their glycemic levels (Mueser & Cook, 2013). Mueser and Cook (2013) stated that consumers' involvement with their treatment and self-management strategies is a coping mechanism. The outcomes of the study is to support interventions that contribute to preventative care, which is needed to educate and minimize the lack of knowledge. The results could promote awareness and lead to a reduction in the burden of monitoring glucose levels among the homeless women. Wiebe et al. (2016) stated that the self-management of diabetes is crucial when it comes to decreasing complications and maintaining quality of life. People are living longer with diabetes, and it is imperative to

know how to use resources to enhance the management of diabetes as well as the quality of life (Wiebe et al., 2016).

Diabetes develops gradually, and affects people as they get older, creating complications. Type 2 diabetes could put individuals at risk as 86 million American adults have prediabetes (CDC, 2016). The participant's views and experiences could be valuable evidence to share and develop strategic networking to promote awareness of this social issue. Keeping the community informed about type 2 diabetes could result in a healthy social change. The basic knowledge shared from one person to the other could influence change in social behavior because eventually, each one would be teaching each other. This changed behavior would promote health literacy by using basic information to distilled awareness and minimized the danger of type 2 diabetes not only among the homeless women, but also among the nation and beyond. The information gathered may be interpreted by me to enhance awareness and keep the community informed to reduce the struggle and burden in controlling glucose levels. The study is to foster ideas to develop programs and interventions in communities to promote healthy habits that monitor and prevent type 2 diabetes.

Summary

In this chapter, I have demonstrated the prevalence of type 2 diabetes using existing research that provides solid evidence of the disease. In the problem statement, I discussed the various levels of complications associated with Type 2 diabetes. These severe complications associated with the disease can significantly reduce quality of life in U.S. populations. The information showed the risk of diabetes and indicated the need to investigate the target population experience to create an in-depth understanding of the phenomena. This unique study could promote simple self-management skills, enhance public awareness, and reduce the risk of type 2 diabetes to achieve positive social change. In Chapter 2, I offer a comprehensive review of literature.

Chapter 2: Literature Review

Introduction

In this study, I explored how homeless females, ages 55 to 64, with type 2 diabetes experience this chronic disease. In Chapter 2, I discuss factors that contribute to the prevalence of type 2 diabetes among this unique population, which is sometimes invisible. Type 2 diabetes can lead to a dramatic decrease in the quality of life and may cause eye diseases, kidney issues, and even amputations of the limbs (Kelly et al., 2016; Narayan & Weber, 2015). Older people are more often affected with type 2 diabetes when compared to younger people. According to Gonzales et al. (2015), some older women who are homeless and have type 2 diabetes do not know how to effectively manage and control their glycemic levels. The CDC (2016a) reported that type 2 diabetes affects older people because the disease develops over many years.

There are several studies addressing type 2 diabetes among various populations, but few studies have addressed the health care of older women who are homeless. The purpose of this qualitative study was to explore the lived experience of homeless females who have type 2 diabetes. This literature review will begin with a discussion of my literature search strategy. In the following sections, I then review integrating factors related to homelessness and provide an overview of retirement-age women. Next, I review literature on diabetes mellitus and its associated risk factors. I also discuss literature on the modification of diet, lifestyle, diabetes self-care education, and social support.

Literature Search Strategy

In the literature review, I examined books and academic journal articles on type 2 diabetes and the homeless population. The key terms I used to search academic databases were *homeless population, female retirement age, diabetes, diabetes education, high blood pressure, social support, self-care management, lifestyle modification, coping, diabetes prevention, and health*. I reviewed these sources carefully, seeking findings related to type 2 diabetes and the older homeless female population. I used Walden University's online library to access MEDLINE, CINAHL, PsycINFO, PsycARTICLES, EBSCOhost, and ScienceDirect databases. I also used Google Scholar and PubMed.com to retrieve information. The FedStats.gov website, which is connected to many United States Federal government agencies including the CDC, and the American Diabetes Association were used to gather statistical information.

Theoretical Framework

Research has shown that diabetes as a chronic disease that continues to rise in the United States (Gonzales et al., 2016). Diabetes care is challenging for those who are affected and for the health care system. In my database searches, I found few studies related to the experiences of older women with diabetes who are homeless. The effectiveness of treatment and glucose control is clearly established. However, it is difficult for some than others to manage glucose with self-care (Gonzales et al., 2016). The developed framework of Bronfenbrenner's (1979) ecological system theory is used to help me to process the underlying experience of the older women who are homeless with this chronic disease.

I used the ecological system theory to explore the lived experience of this unique group. Bronfenbrenner (1979) reported micro system is a pattern of activities where the social role and the interpersonal relation is encountered, developing a person through a face-to-face setting. To develop and improve diabetes regimen compliance, practitioners need an in-depth understanding of the barriers that prevent older homeless women from applying personal skills. Gonzales et al. (2016) suggested that long-term medication usage and lifestyle changes are essential to properly managing control of type 2 diabetes. The control of glycemic levels requires the individual to adopt a different behavioral pattern or lifestyle such as the administration of medications, following specific diet routine, taking care of one's feet, following up with frequent visits to his or her primary care providers, and blood glucose monitoring including staying active (Gonzales et al., 2016).

The development of an individual is merged through interactions with their environment and this encourages researcher to study the settings in which an individual spends time to interaction as they share with others in the same environment (see Bronfenbrenner, 1979). The characteristics of the selected group members and others who they interacted with develop over time. The ecological system theory offers a platform to examine the human development past, present and, future (Bronfenbrenner, 1979).

This theory is in an organized manner to discover and comprehend the human social role (see Bronfenbrenner, 1979). This study was explored through the phenomenological theory of Moustakas (1994) to describe the experience of the

participants in their environmental essence. Consciousness is the appearance of precisely what happened in reality while it appears to the world as the production of learning (see Moustakas, 1994). The model of Moustakas (1994) give me the opportunity to mingle with the object in nature to understand the meaning and relate the experience as its natural setting. I examined the experiences of the homeless women to see how they manage type 2 diabetes. I explored barriers perceived by the homeless women using Moustakas (1994) phenomenological approach to connect the outward appearance of the experience and how it was viewed by participants.

I used the social-ecological system as a framework to explore the unique sample. Bronfenbrenner (1979) held that development of human behavior is affected by the microsystem, which is influenced by a multitude of factors. According to Bronfenbrenner (1979), such understanding of these influences that govern behavior creates a sense of the context via naturalistic and experimental observations. There are several levels to interpret human interrelationships: the micro-, meso-, exo-, and macrosystems (Bronfenbrenner, 1979). The interpersonal relations of the environment (micro-system), influenced by various interactive settings (meso), the external settings which are the individual (exo), and the culture (macro) configured the elements of human behavior (Bronfenbrenner, 1979). I used Moustakas's (1994) phenomenological design to understand the relationships that impacted participants' diabetes care.

Homelessness

Grenier, Barken, and McGrath (2016) described homelessness as a situation of an individual or family without stable, permanent, appropriate housing. The phenomena

associated with homelessness are recognized globally, but it is a local problem that affects communities both in developed and developing countries (Bowen, Barman-Adhikan, Fallin, Miller, & Zuchlewski, 2016; Busch-Geertsema, Culhane, & Fitzpatrick, 2016). The increasing population of homelessness with single adults, and latter- middle-aged adults brings a new set of vulnerabilities (Bowen et al., 2016). They may be ineligible for resources that previously benefitted them, such as health services (Bowen et al., 2016). Homelessness in older populations is now common because of the compounded impacts of poverty, inequality, and the increasing cost of housing (Grenier, Barken & McGrath, 2016). Chambers et al. (2014) argued that homelessness is defined as living in a shelter, public place, vehicle, abandoned building, or someone else's place for 7 days or more. The primary cause of homelessness is a lack of affordable homes and poverty that promote the adverse effects of economic and material deprivation (Chambers et al., 2014; Grenier et al., 2016).

Women who are homeless face considerable individual and structural barriers to securing employment (Brown & Mueller, 2014). A stable job with a living wage is an essential pathway to ending homelessness (Brown & Mueller, 2014). It is essential to note that even when jobs are available, other factors could hinder homeless women from engaging in the workforce (Brown & Mueller, 2014). The hardships experienced, such as economic and social deprivation, are factors that may affect homeless women's sense of efficacy to secure employment and escape the horror of homelessness (Brown & Mueller, 2014). Brown and Mueller (2014) explained that there is a growing body of research on mental health and psychological distress among homeless women that also examines the

vital role of support from others. This support plays a significant part in assisting these women to cope with the stressful experience of homelessness (Brown & Mueller, 2014). The challenge is enormous as homeless women try to overcome the barriers of their social environment to move to social independence and secure employment (Brown & Mueller, 2014).

Baby boomers have lived through various social, political, and economic transformations that have increased the potential for homelessness (Waldbrook, 2013). The restructuring and reductions of government social assistance programs have caused changes in family structure which have impacted women, in particular (Waldbrook, 2013). The population of aging homeless adults is on the rise, and these people are considered physiologically old at age 50 (Hategan, Tisi, Abdurrahman, & Bourgeois, 2016). This unique group of older adults experiences a high level of disease burden because of limited access to primary care physicians (Hategan et al., 2016). There are degenerative syndromes that homeless women experience as they age, like impaired mobility and vision, depression, and cognitive impairment leading to the cause of homelessness (Hategan et al., 2016).

One would believe that homelessness was triggered because of running away from home, the death of parents or family breakdown. The pathway to homelessness among older adults could be a shortage of subsidized housing, poverty and lack of employment (Brown et al., 2016; Chambers et al., 2014; Grenier et al., 2016). Bean, Shafer, and Glennon (2013) suggested that homelessness is a factor for death as people who are experiencing homelessness contend with mental illness and other physical

ailments. Salem et al. (2015) suggested that homelessness among older women is increasing steadily. This unique group of women finds it more challenging to adapt in shelters than their younger counterparts. One example shared was the difficulties that these women encounter when negotiating social services as they have to wait longer to receive assistance (Salem et al., 2015). Persons who are homeless will always be at risk for poor health and diet because they are susceptible to unhealthy behaviors (Biederman & Lindsey, 2014). Homelessness is seen as a set of abnormal behaviors, and it could be a disease that needs to be treated instead of a political or social issue (Biederman & Lindsey, 2014). The individual behaviors could be influenced by his or her environmental factors that increase such behaviors which are noticed in the homeless community (Biederman & Lindsey, 2014).

Adults who are homeless experience poorer health as they are on the streets longer. Schizophrenia is more likely to set in allowing them to be less employable and having a limited social support network (Biederman & Lindsey, 2014). The problem of homelessness is a moral challenge that millions of people face on a daily basis in the developed world (van Leeuwen, 2017). Van Leeuwen (2017) agreed that both rich and poor people have the freedom to sleep on the streets at night, but the rich fail to take advantage of this freedom. The author tries to answer the puzzling questions by saying that most citizens have become accustomed to the sight of the homeless in the cities that they simply have become invisible or perceived as part of the city (van Leeuwen, 2017).

The point of view related to homelessness is that it is not of moral satisfaction (van Leeuwen, 2017). An approach to homelessness argues for a more diverse

conception of public space where an accommodating system of laws and policies about what is permitted on the city streets could be considered (van Leeuwen, 2017). The homeless people practice sleeping in public, urinating in public parks or alleys and panhandling which is banned by local government (van Leeuwen, 2017). According to van Leeuwen (2017), homeless individuals have the right to live in public spaces; this right outweighs the interest that others have in not being physically or morally offended. Therefore, this should be related to creating a cosmopolitan openness to the homeless and not assimilation; they should be allowed to exist and so should the need for a political acceptance of heterogeneity (van Leeuwen, 2017). Van Leeuwen (2017) expressed that homelessness is uncomfortable and it is a reminder of the price that human paid for social structure. The homeless people end up on the streets because of various reasons and respecting them could be categorical and not conditional. However, sometimes those in need, sleeping outside without food or in a shelter, one has to consider if other kinds of recognition could be considered besides respect (van Leeuwen, 2017).

Integrating Factors Leading to Homelessness

Waldbrook (2013) stated that personal troubles are mainly compounded by systematic barriers such as competition in housing cost, limitation of subsidized housing, not enough social assistance and disability benefits. People of all ages could become homeless for these reasons but the older people are more vulnerable to homelessness with income levels, changes in their health and lack of employment status or job loss (Salem & Ma-Pham, 2015; Waldbrook, 2013). Some people cannot maintain their homes because of chronic illnesses, low income, dementia, and mental health problems. Others

are lacking the skills and resources to cope with the unexpected changes leading to the outcome of homelessness (Waldbrook, 2013). Taylor, Kendzor, Reitzel, and Businelle (2016) explained that the homeless adult experience poor physical and mental health status. Lack of empowerment to secure employment could lead to homelessness. The abuse of drug and alcohol is highly ranked in the arena of factors associated with homelessness (McQuiston, Gorroochurn, Hsu & Caton, 2014).

According to McQuiston et al. (2014), homelessness reoccurrence is associated with a group of people with substance use disorder. The sample unit was used to compare the features of recurrent homelessness with those of chronic homelessness and being housed stably. Over 300 participants were interviewed upon entry at a shelter, and each one was followed every six months for 18 months using standardized social and mental measures. A baseline assessment was used to analyze housing experiences during the eighteen months (McQuiston et al., 2014). From the total of 81% who obtain housing over the eighteen months 23.7% 66 persons experienced homelessness again (McQuiston et al., 2014). The investigation demonstrated that people could become susceptible to change behavior as it a continuum cycle due to their prevalence of drug and alcohol usage.

A chaotic experience like job loss and family breakdown could lead to homelessness (Brown et al., 2016; Mago et al., 2013). The problems associated with homelessness consist of factors that occur at the micro, and macro levels of society. These are categories of facts in levels that differ between what individuals are capable of controlling and that which he or she cannot (Mago et al., 2013). Many veterans who are

returning home are at risk of homelessness because studies have shown low-income and income-related variable including pay grade and unemployment as risk factors for homelessness (Tsai & Rosenheck, 2015). Veterans are a unique segment of the population here in the United States. Their health and psychosocial problems could be more vulnerable than other adults as they experience higher exposure to combat-related trauma (Tsai & Rosenheck, 2015).

Women enter homelessness based on several reasons. This process can be a long one as a woman's homelessness could have been built up over a significant period of time (Williams, 2016). Various factors could intersect to affect the housing stability of a woman. Williams (2016) explained that a homeless woman's parents and current circle of friends could be low income. Their friends and family lacked the resources needed to assist their homeless relatives with sufficient money or housing accommodation. Williams (2016) stated that poverty is connected to homelessness in both a complex and straightforward manner, which has much to do with education, occupation and housing options. The opportunities available to the rich and the poor could be different, but additional poverty is associated with the traditional responsibility of child-rearing, lower wages, separation from family support systems as well as a result of past or present violence (Williams, 2016). Women's poverty has increased in the past 2 decades creating a unique set of issues and problems for homeless women (William, 2016).

Williams (2016) argued that single women who are head of the family are burgeoning among the homeless as government cuts in disability benefits, increase housing cost, the divorce rate is high, domestic violence is ramping, the poverty level is

rising caused by unemployment, low paying jobs and, wage discrimination have no control. The social difficulties that many two-parent families face to stay out of poverty are rough, but single-parent families headed by women are much worse off than married couples (Williams, 2016). According to Williams (2016), the National Center on Family Homelessness reports that 71% of homeless families are single-parent households headed by women. These are essential factors that lead to homelessness as women struggle most of their lives to maintain a family. Williams (2016) also stated that homelessness stems from individual decisions and choices or from psychological problems ranging from low self-esteem to mental illness. Homelessness could stem from various reasons, but a breakdown of a relationship, loss of work and loss of housing due to unemployment could lead to homelessness in late life (Brown et al., 2016).

Many women who suffer from mental illness, depression and bipolar disorder are likely to experience homelessness because of the prevalence of these health issues among the unique population who encounter poverty. Childhood abuse and trauma are significant factors that are associated with homelessness (Piat, Polvere, Kirst, Voronka, et al., 2014). Poverty and financial constraints contribute to the lack of housing. The high price in rent and little or no income to sustain housing influence the trend of increasing growth with homelessness (Piat et al., 2014). Individuals who are homeless suffer from poor nutrition and can also become obese due to inadequate activities (Taylor et al., 2016). The homeless population has high-risk factors related to health as some of them experience substance abuse like alcohol and drugs. The risk of drinking, smoking and poor nutrition could lead to hospitalization (Taylor et al., 2016). If these at-risk health

behaviors are not changed through interventions, the continuing pattern of these behaviors could result in homelessness because it does not promote a desire to improve homelessness.

Women Close to Retirement Age

Vo et al., (2015) explained that there is no set age to retirement, but the normative expectation occurs when one has passed the age of 60 years old. The transition of retirement life is associated with many changes in workforce performance, lifestyle and, social roles (Vo et al., 2015). Some people make a positive decision to retire from the workforce and with this comes a change in their lives and well-being. These people see retirement as a time to reinvent themselves by improving mental and physical well-being (Vo et al., 2015). Other individuals who retire arose to such decision due to external pressure like redundancy, ill health or the need to take care of a sick or disabled family member (Vo et al., 2015). The external pressure of retirement could lead to poor mental health outcomes because of lost work role and social networks. Studies show that poor mental health is associated with people who retire earlier than workers (Vo et al., 2015).

The population approaching retirement age is quickly increasing and women over 50 years old seldom take into consideration how much exercise or physical activity they need each week. The transition into retirement is associated with significant alterations in one's lifestyle (Baxter et al., 2016). According to Baxter et al. (2016) recent study suggested that older people from higher socioeconomic groups were physical activity after retirement than people who were from lower socioeconomic groups. Women in the age range of 55 to 64 years old are close to retirement transition and could be eligible for

Medicare since the extended service to people who are younger than age 65 was implemented in 1972 (LaManna, Crowley & Claypool, 2015). The Medicare health program is a major facilitator that seeks to improve the health outcome of people who are older (LaManna et al., 2015). Individuals who are older can benefit from this program as they strive to enhance the quality of life as well as the independence of people with disabilities in a community setting (LaManna et al., 2015).

Diabetes Mellitus

According to the American Diabetes Association (2016), diabetes is a chronic illness that requires continuous medical care with a multifunctional risk-reduction strategy that goes beyond glycemic control. Self-management education and support are crucial to the prevention of complications as well as decreasing the risk of long-term issues (ADA, 2016, p. 1). It is more frequent in women with previous gestational diabetes mellitus to develop type 2 diabetes (ADA, 2016). However, ethnicity, cultural, religious, sex differences and socioeconomic status could affect the prevalence of diabetes results (ADA, 2016). Kelly et al. (2016) stated that diabetes is a prevalent health condition that is diagnosed in the older population group. Healthcare professionals have comprehensive knowledge about the importance of preventing and controlling diabetes mellitus as well as hypertension (Kelly et al., 2016). Recent developing evidence shows that age-related cognitive decline and the risk of dementia could be a consequence of diabetes (Kelly et al., 2016). The chronic illness of diabetes mellitus is highly treated and controlled by medication and lifestyle changes (Kelly et al., 2016; Lucherini, 2016).

Beckles and Chou (2016) stated that diabetes mellitus is quickly increasing here in the United States since the mid-1990s. Diabetes mellitus (DM) is a leading cause of morbidity and mortality throughout the world with 80% of the affected population living in developing countries (Ranasinghe et al., 2015). The chronic health conditions that are associated with diabetes mellitus have an impact on the quality of life (Ranasinghe et al., 2015; Shields, Baxter & Mani, 2016). De Groot et al. (2016) explained that type 2 diabetes mellitus is a representation of demanding biopsychosocial challenges for not just the individual with the disease but also their families. The etiology of diabetes is an autoimmune disorder that depletes the pancreas of the insulin-producing cell (de Groot et al., 2016; Lucherini, 2016). This means that diabetes causes a lack of insulin and the body cannot create energy from glucose (Lucherini, 2016). Type 2 diabetes mellitus is the most common diabetes; it allows the body to produce insulin still, but it is not able to use it efficiently (Lucherini, 2016).

The blood sugar or glucose is the amount of sugar in one's blood, and it can be self-tested (Lucherini, 2016). Women who have diabetes mellitus can become hypoglycemic, which is having low blood sugar levels, causing them to experience an episode of shaking, sweating, light-headedness and even loss of control over their body. If the person with diabetes has a high blood sugar or glucose levels, then he or she becomes hyperglycemic which has less acute symptoms like having increased thirst, urination, and weight loss. Therefore, this condition could lead to long-term complications causing amputations of the limbs, loss of vision and heart attack (Lucherini, 2016).

A recent study showed there is a growing population of older Latino adults in the United States and they are projected to be the largest racial, ethnic minority in this age group by 2019 (Garcia et al., 2016). The growing population of older Latino individuals disproportionately have depression and diabetes mellitus. Garcia et al. (2016) explained that the population could be at a higher risk of some 66% higher of Type 2 diabetes than their non-Latino adult counterpart. The analyses show that diabetes mellitus is likely to develop depressive symptoms among older Latino adults (Garcia et al., 2016).

Populations at a higher risk for diabetes are ethnic and racial minorities as well as people from a low socioeconomic background (de Groot, 2016). These populations are vulnerable to environmental exposures like poverty and stress that increases the risk of mental illness as it interferes with self-care and could compromise medical management (de Groot, 2016).

De Groot et al. (2016) explained that individuals with type 2 diabetes are likely to experience depression if they are using prescribed insulin when compared to those using noninsulin medication or dietary and lifestyle intervention alone. Insulin is not the causative agent, but it requires a more severe self-management burden for the individual (de Groot et al., 2016). Diabetes mellitus is categorized as a chronic disease that is insulin deficiency or insulin resistance that could result in blood glucose levels being elevated (Ding, Sun & Shan, 2017). Ding et al. (2017) suggested that the long-term complications of hyperglycemia can lead to microvascular and macrovascular issues. Cardiovascular disease has been the cause of many death with people who have diabetes (Ding et al., 2017). Current analyses show that regardless of improvement in lifestyle

management and drug therapy cardiovascular disease is still a life-threatening concern for diabetes (Ding et al., 2017).

According to Blair (2016), the characteristic of hyperglycemia in a person who has diabetes mellitus is due to insulin resistance, meaning not sufficient insulin secretion in the pancreas. Type 2 diabetes is a significant health issue as it impaired glucose regulation because of the dysfunction of the pancreatic beta cell (Blair, 2016). The individual's body is not capable of using glucose for energy, and the pancreas is not making sufficient insulin causing the person to experience hyperglycemia (Blair, 2016). Some 26 million people in the United States have been diagnosed with diabetes, and 79 million are prediabetic leading to almost one-third of the population being an impact with this disease (Blair, 2016). The Center for Disease and Prevention (2016) reported that over 29 million Americans are living with diabetes and 86 million are living with prediabetes. This health condition has raised concerns and urges researchers through the (CDC, 2016a) to work hard in reversing the epidemic in the United States by focusing on prevention and identifying treatments that are effective to improve medical care. In 2013, diabetes was rated as the seventh leading cause of death here in America (CDC, 2016a). Reports from the (CDC, 2016a) stated that Type 2 diabetes is accounted for approximately 90 to 95 % of all diagnosed case of diabetes and the Type 1 is accountable for 5%.

Risks Factors Related to Diabetes

Depression could be a risk factor as it is associated with poor glycemic control (Silverman et al., 2015). Food insecurity reports a higher rate of depression as well as

stress and anxiety (Silverman et al., 2015). Few studies show that persons with diabetes not excluding older homeless females experience depression (Silverman et al., 2015). Silverman et al. (2015) explained that diabetes-related distress also links to emotional distress that is caused due to the burden and treatment of diabetes. People who have limited control over what they eat experience powerlessness over his or her nutrition (Silverman et al., 2015). The Bronfenbrenner's (1979) theory that helps researchers to examine different settings where people spend their time was used. Looking at other cultures diabetes have similar outcome when compared. According to Chun, Kwan, Strycker, and Chesla (2016), Chinese American has a 7.4% prevalence of type 2 diabetes when compared to non-Hispanic whites, as their diabetes risk appears with a lesser body mass index than the broad U. S populations base on genetic predisposition and visceral adiposity. Chun et al. (2016), suggested that stress increases the risk of diabetes because stress contributes to insulin resistance and adiposity. Based on a study of over 150 participants at an average age of 60 with half being females and diagnosed with diabetes for eight years (Chun et al., 2016). The results declared that the percentage of hemoglobin, which is the protein in a person's red blood cell that carries oxygen and is linked with glucose was higher than the target clinical goal of 7% (Chun et al., 2016). Chun et al. (2016) stated that an outcome shows 7.9% indicating that a healthy Chinese American population with type 2 diabetes shows some evidence of symptoms related to depression and moderate diabetes distress associated with depression in the 16-week trial of the study.

The CDC (2016a) reported that race and ethnicity are factors of diabetes as African Americans, Hispanics, Latinos, American Indians, Pacific Islanders, and some Asian Americans are at higher risk than Caucasians. Being overweight and older than 45 could also be factors as well as having a family history of type 2 diabetes (CDC, 2016a). Not active physically for at least three times per week could be a factor leading to this chronic disease (CDC, 2016a). Kautzky-Willer, Harreiter, and Pacini (2016) explained that biological and psychological factors have a significant effect on adults who have type 2 diabetes Mellitus. Most of all the age dependency is evident, both males and females have some slight differences in age (Kautzky-Willer et al., 2016). The proportion of overweight women was increased in 2013 to 38% and men similar in men who were 37%. A systematic analysis shows that females tend to be more overweight than their male counterparts and women seem to be more overweight after the age of 45 years (Kautzky-Willer et al., 2016). In countries with more significant gender inequality, more substantial gender differences in obesity rates were reported (Kautzky-Willer et al., 2016).

There was a reliable inverse connection discovered in a multiethnic study between a comprehensive measure of income-based socioeconomic inequality and obesity in young Caucasian women (Kautzky-Willer et al., 2016). The rates of obesity and income inequality was related to diabetes mortality in developed countries with both genders, and there was a stronger effect in women (Kautzky-Willer et al., 2016). Therefore, being overweight is a primary risk factor for type 2 diabetes in men and females, and the pattern resembles those of other regions with obesity (Kautzky-Willer et al., 2016). The

analysis demonstrates that impaired glucose tolerance was more common in females than males regardless of independent age. But most persons with type 2 diabetes mellitus live in low and middle-income countries however the prevalence rates are much higher in high-income countries (Kautzky-Willer et al., 2016). There is strong evidence that obesity-related diabetes prevalence has developed since the past three decades, and the relationships are involved with different ethnicity, migration, culture, lifestyle, gene-environment interactions, social roles and socioeconomic (Kautzky-Willer et al., 2016). Psychosocial risk factors were recognized in the analysis such as low educational level, occupation, and income which also contribute to unhealthy lifestyle and social disparities leading to obesity and type 2 diabetes in women (Kautzky-Willer et al., 2016).

The status of socioeconomic in education level and income is linked to the prevalence of obesity diabetes in developed countries. Bronfenbrenner's (1979) theory of ecological context provides a guide to understand behavior. The consumption of fast food contributes to the epidemic as it promotes the consumption of sugar-sweetened beverages (Kautzky-Willer et al., 2016). Both men and women consuming sugar-sweetened beverages show an excess risk of developing type 2 diabetes mellitus (Kautzky-Willer et al., 2016). Kautzky-Willer et al. (2016) explained that smoking and alcohol consumption is also a risk of developing type 2 diabetes but alcohol is a lower risk factor for the development of diabetes. When women are experiencing postmenopausal and practice regular intake of alcohol, she could increase her estrogen levels (Kautzky-Willer et al., 2016). The women could be independently connected to higher endogenous estradiol levels. The estradiol along with sex hormone-binding

globulin could have influenced the protective association between alcohol consumption and diabetes risk (Kautzky-Willer et al., 2016).

High Blood Pressure

High blood pressure is a condition that has affected about 30% of the adult population, and it is a well-known diagnosis at outpatient clinics (American Family Physician, 2016). This condition is a significant contributor to heart failure, heart attack, chronic kidney disease and stroke (American Family Physician, 2016; Emdin et al., 2015). The American Family Physician (2016) has reported that blood pressure has impacted a variety of short-term factors like emotions, stress, pain, physical activities, and drugs such as caffeine and nicotine. People with type 2 diabetes and are obese often times experience hypertension (Emdin et al., 2015; Espeland et al., 2015). Espeland et al., (2015) agreed that two recommendations for controlling hypertension are weight loss and pharmacological management. However, Daskalopoulou et al. (2015) suggested that worldwide high blood pressure has affected more than 40% of the adult population and it is a risk factor globally for death or disability. Hypertension is a high-risk factor and since 1992 to 2007 blood pressure incidences have improved significantly in Canada (Daskalopoulou et al., 2015). Emdin et al. (2015) explained that high blood pressure is a well-established risk factor for individuals with diabetes.

According to Casagrande, Fradkin, Saydah, Rust, and Cowie (2013), the prevalence of diabetes is foreboding future growth in premature death and, economic cost because it is associated with its complications. If blood pressure levels are reduced significantly, it could decrease microvascular complications (Casagrande et al., 2013).

Casagrande et al. (2013) said lipid control reduces cardiovascular disease which is a leading cause of death for people with diabetes (Casagrande et al., 2013). A study conducted by the American Diabetes Association suggested that many adults with diabetes achieve hemoglobin lesser than 7.0% and the management of diabetes still remains a challenging process (Casagrande et al., 2013). But the individuals who lowered their blood pressure also reduce the risk of stroke, heart failure, vision loss and diabetes-related death (Casagrande et al., 2013). A skilled team of clinicians' access is required as well as diabetes educators to distill self-management support and personal knowledge to improve control of the risk factors associated with high blood pressure (Casagrande et al., 2013).

Coping with Diabetes

The treatment of type 2 diabetes mellitus entirely relies on a considerable degree of self-care or management to diet, exercise including other healthy behaviors (Hara et al., 2014). Long-term treatment is required, which impose anxiety over hypoglycemia symptoms (Hara et al., 2014). The coping strategies for diabetes mellitus is a contribution to awareness, environmental factors like family and friend relationships, emotional factors and, stress awareness (Hara et al., 2014). Hara et al. (2014) demonstrated that the psychological impact of diabetes is more significant for females than their male counterparts as scores suggested that females' individuals feel greater stress than men. The overall outcome of the study shares that gender and age differences are closely related to stress and coping with the diet therapy of people with type 2 diabetes (Hara et al., 2014). However, males were strongly dependent on the support of

cohabiting spouses (Hara et al., 2014). It was clear that education on coping as well as stress strategies could use some form of alteration to accommodate the individual needs or excluding the consideration of gender or age differences (Hara et al., 2014). The author expressed the importance of sex, age and family environment to create an individualized approach to addressing perceived stress to establish educational programs for coping techniques that could maximize treatment to develop a more comprehensive and continuous glycemic control (Hara et al., 2014).

According to Houle (2016), the status of socioeconomic refers to the social and economical disposition of an individual social structure. The leading cause of most death and disability is associated with socioeconomic status not excluding diabetes. It is believed that people with low socioeconomic status are liable to suffer from type 2 diabetes (Houle et al., 2016). Without the optimal of glycemic control which is glycosylated hemoglobin is greater than 7.0%, diabetes could have severe consequences leading to cardiovascular disease and nephropathy (Houle et al., 2016). Type 2 diabetes requires a series of self-management care routine causing the person with diabetes to participate daily in activities related to his or her health such as nutrition, physical activities, blood glucose monitoring and consistency in medication self-administration (Houle et al., 2016).

The influence of socioeconomic status in the United States on glycemic control could lead to an adverse outcome given this ability of complications (Houle et al., 2016). People with low socioeconomic status have more stress as it presents an exposure of financial burden, poor job conditions, inadequate housing and devitalized neighborhoods

(Houle et al., 2016). An active skill of coping strategies is required to handle these stresses and decrease the deleterious effects on the course of illness (Houle et al., 2016). The person must be able to cope emotionally by getting emotional support from family or friends. Focus on the problem is a coping skill that is required to take action to make the situation better like monitoring one's glucose level (Houle et al., 2016). Houle et al. (2016) agreed that people with low socioeconomic status use minimum coping strategies than people of a higher socioeconomic structure. The strategies for coping assisted in explaining the relationship between socioeconomic status and glycemic control (Houle et al., 2016). Houle et al. (2016) claimed that results show, living in poverty and education level are associated with glycemic control among people who have type 2 diabetes. The universal-access healthcare system such as the one in Canada presented some sign of social inequalities (Houle et al., 2016). This is a demonstration of Bronfenbrenner's (1979) proposed a sequential level (macro) culture describe human behavior. Therefore, Hara et al. (2014) and Houle et al. (2016) agreed that the effects of socioeconomic status on glycemic control are mediated by the manner in which people perceived their disease.

The analysis of Houle et al. (2016) explained that individuals with low socioeconomic status were more likely to fail at coping or refusing to accept that they need to make a situation better by trying to do something about it. Interventions seek to assist people in actively cope with the stress of managing a chronic disease such as diabetes, and these interventions are beneficial (Houle et al., 2016). Houle et al. (2016) encouraged professionals to promote interventions such as these to improve coping behaviors with their clients and establish reduction from being in the avoidant population.

Evidence revealed that illness representations could be a positive change through target intervention and such change might affect the controlling of glycemic levels (Houle et al., 2016). However, to accurately modify the representation of diabetes unpredictability it is essential to ensure that the individual understands the influence of self-management behaviors on his or her levels of Hemoglobin glucose (Houle et al., 2016).

Diabetes is a common, non-contagious disease that could cause severe complications and it is prevalent in the world (Shamsalinia, Pourghaznein & Parsa, 2016). The incidence of diabetes is in the millions, and in another 10 years from now, it will be in the hundreds of millions. Several studies demonstrate the necessity of medical interventions and self-care practices to prevent complications (Shamsalinia et al., 2016). Failure to follow these conventional regimens of self-care exercises is a lack of sufficient motivation on the individual's behalf (Shamsalinia et al., 2016). The level of one's religious beliefs could be a factor and hinder making a change in the understanding of the disease (Shamsalinia et al., 2016). On the other hand, religious beliefs could influence the improvement in the sense of control over stressful events (Shamsalinia et al., 2016).

Shamsalinia et al. (2016) explained that beliefs have a purpose and meaning for the event which strengthens a sense of belonging to the universe. Studies discovered spiritual beliefs could influence health habits significantly by controlling the effects of social, demographic and non-religious variables; religious coping strategies affect mental health leading to improved physical health (Shamsalinia et al., 2016). Bronfenbrenner's (1979) perspective explains the four categories for interpreting interrelationships. The interpersonal relations micro could influence many interactive settings meso, the exo

which is the external setting of individuals and culture macro assist in describing the behavior of human from the ecological environment (Bronfenbrenner, 1979). The importance of a coping mechanism for people with chronic illnesses was observed in several studies (Shamsalinea et al., 2016). Nevertheless, not many recognitions are given to this strategy of coping as the outcome can be considered to be negative or positive (Shamsalinea et al., 2016). The positive coping method consisted of praying, using positive appraisal of a negative situation and feelings of a safe relationship with God (Shamsalinea et al., 2016). The negative coping has to do with the attribution of difficult circumstances to divine punishment and feelings of withdrawal but with the positive coping people look to God the help them and they believe in purposeful life (Shamsalinea et al., 2016).

Shamsalinea et al. (2016) concluded that people with diabetes show the low average level of hope. However, the Muslims, Christians and the Orthodox Jewish communities all have a significant effect on the levels of hope when it comes to positive coping due to their religious behaviors (Shamsalinea et al., 2016). A strong social support was also associated with the positive coping religious skills leading to an increase in self-care and adherence to a therapeutic regimen which could decrease complications to improve the quality of life (Shamsalinea et al., 2016). Li, Drury, and Taylor (2014) suggested that an individual with diabetes is responsible for the management of the disease.

Patients should be educated about diabetes and develop skills to effectively manage diabetes (Li et al., 2014). The method of coping serves that the individual

undertakes many stressors in order to construct an understanding how to react to the disorder and manage such extensive stressors by adjusting with the experience (Li et al., 2016). Li et al. (2014) said that women with type 2 diabetes seek support from family members and the family members assisted them in the management of the disease. Women having friends with diabetes provide support and empathy (Li et al., 2014). Other women would have coped with the disease through their religious beliefs and faith by relying on their own inner strength (Li et al., 2014). It can be an emotional and mental strain for women to live with type 2 diabetes as they sometimes feel they have no control over their lives (Li et al., 2014). The culture of origin could be a factor for women coping with diabetes as Samoan and Tongan women mostly use alternative remedies (Li et al., 2014). Therefore, professionals are encouraged to promote efficient management of diabetes as women could hinder themselves if they do not trust the healthcare providers and experience a lack of respect (Houle et al., 2016; Li et al., 2014).

Modifiable Diet and Lifestyle

Ranasinghe et al. (2015) suggested that evaluating people's perceptions and knowledge about a healthy lifestyle, which is diet and physical activity could assist in developed evidence-based intervention. The modification factors for diabetes mellitus are healthy eating and physical activities (Shields et al., 2016; Ranasinghe et al., 2015). This strategy, in particular, could seek to decrease the on-going epidemic of diabetes. One example is the small country of Sri Lanka that has a high disease burden related to diabetes even though the larger population of Sri Lanka live off the island; but immigrants and workers in countries such as the U. S, Canada, Australia, United

Kingdom, and other European countries also carry the same disease risks (Ranasinghe et al., 2015). This shows that the disease is not in one area and therefore it is becoming a global problem (Ranasinghe et al., 2015).

In some regions, many people eat mainly rice while others consume a lot of wheat-based meals. Protein intake pattern is different in Sri Lanka, but fish consumption is high because of its availability and the dominance of the Buddhist religion in that country (Ranasinghe et al., 2015). In South Asia, the consumption of beef is rare due to Hindu influence, and pork eating is not indulged in Pakistan or Bangladesh based on their religion (Ranasinghe et al., 2015). Therefore, the knowledge of diet and exercise are essential to educating adults with diabetes mellitus worldwide (Ranasinghe et al., 2015). Individuals with diabetes are required to maintain a balanced diet, energy exertion by being physically active and having oral or injectable medications (De Groot, 2016).

Marin-Penalver, Martin-Timon, Sevillano-Collantes and Del Canizo-Gomez (2016) stated that in order for a person with diabetes to have the right metabolic control he or she must be able to change lifestyle behavior and adapt to pharmacological treatment. Physical activities and dietary intake are the two primary components to balance energy (Marin-Penalver et al., 2016; Ranasinghe et al., 2015). Sleep is also essential as evidence supports that 6 to 9 hours of sleep each night is associated with a reduction in cardiometabolic risk factors (Marin-Penalver et al., 2016). Aerobic exercise was recommended to show benefits for persons with type 2 diabetes as it promotes weight maintenance and controls cardiovascular risk factors (Marin-Penalver et al., 2016). This kind of exercise should be practiced three to five times each week to reduce

mortality and improve cardiorespiratory fitness (Marin-Penalver et al., 2016). Marin-Penalver et al. (2016) suggested that lifestyle modification is the key element to managing type 2 diabetes along with pharmacological agents. The cure for diabetes may not be visible in the near future, and the active agents that are developing will assist in improving the quality of life for people with type 2 diabetes (Marin-Penalver et al., 2016).

The prevention of type 2 diabetes requires intensive lifestyle intervention like lose weight, reduce the intake of alcohol, increase the intake of vegetables as well as physical exercises (Weng et al., 2016). Glucose control should be considered, and regular check-up needs to occur two to four times annually especially with people who have a long course of diabetes (Weng et al., 2016). Foot care should be a regular practice and individuals with diabetes mellitus need to be educated about caring for their feet as the incident of foot ulcers can occur (Morey-Vargas & Smith, 2015; Weng et al., 2016). Morey-Vargas and Smith (2015) stated that approximately 25% of people with diabetes could develop foot ulcer throughout his or her lifetime. This is based on a study conducted in North America and the European countries which declares that diabetic foot ulcers range from 0.6% to 2.2% (Morey-Vargas & Smith, 2015).

The incident rate in the United States could be higher in ethnic minority groups which are a unique population of African Americans and Hispanics (Morey-Vargas & Smith, 2015). Ulceration of the foot requires prolonging treatment as it is a source of infections that could lead to amputation of the lower extremity like to legs and feet causing the individual to be hospitalized (Morey-Vargas & Smith, 2015). The

multidisciplinary strategy in managing foot ulcer is the education of optimal education between clinicians and their patients to create awareness for high-risk individuals (Morey-Vargas & Smith, 2015). The cleansing of the feet that is sometimes taken for granted is vital to develop prevention and awareness of foot ulceration. Peripheral neuropathy plays the main character in the pathogenesis of foot ulcers as it reduces pain sensation and causes intrinsic muscular atrophy that develops into foot deformations (Morey-Vargas & Smith, 2015). When the feet are not cared for the skin could become dry and crack or fissure. Patient education through the clinicians could promote foot care knowledge and self-examination to strategically prevent diabetic foot complications (Morey-Vargas & Smith, 2015).

The treatment of painful diabetic neuropathy is essential which includes pregabalin, gabapentin for anticonvulsants and antidepressants like duloxetine, tramadol and oxycodone are all systematic treatment related to diabetes (Weng et al., 2016). The lower extremity vascular disease is not a complication associated with type 2 diabetes, but the risk of this disease in people with diabetes has increased significantly (Weng et al., 2016). Weng et al. (2016) suggested that individuals who are over the age of 50 years old with diabetes should consider lower extremity arterial disease screening as a routine because it is a component of peripheral artery disease. Clinical evidence shows that active glycemic control in people with type 2 diabetes has a limited effect on decreasing the risk of cardiovascular, cerebrovascular and even death especially in individuals who are older and have longer disease duration of diabetes (Weng et al., 2016). However, active management of multiple risk factors could lead to a tremendous decrease in the

risk of cardiovascular and cerebrovascular disease in people with diabetes (Weng et al., 2016).

Diabetes Self-Care Education

The chronic condition of diabetes mellitus is a lifelong disorder and must be modified by eating healthy, participating in physical activity, following prescribed medication and self-monitoring of blood glucose levels (Reisi et al., 2016). The benefits of self-care result in a meaningful outcome has shown in previous studies (Reisi et al., 2016). Health literacy plays a vital role in self-care as individuals with diabetes are required to participate in the navigation of a complicated health system (Reisi et al., 2016). Health literacy is defined as the social and cognitive skills that determine the motivation as well as the ability of an individual to gain access to understanding and, using the information in a manner which promotes and maintains good health (Reisi et al., 2016). The first skill required is the ability to read and write, sufficiently to manage health efficiently on a daily basis (Reisi et al., 2016). Next, one must be able to communicate health literacy with a greater responsibility to obtain relevant information, find meaning and apply the new information or knowledge to change circumstances (Reisi et al., 2016).

The expectations of these behaviors serve as an incentive or positive outcome providing motivation for self-efficacy (Reisi et al., 2016). Reisi et al. (2016) explained that self-efficacy is the confidence to overcome barriers while promoting motivation to engage in behaviors. There is clear evidence that self-efficacy interaction shows a positive outcome of expectations especially with diabetes self-management (Reisi et al.,

2016). Findings from other studies show that communicative health literacy had the highest level of the score and functional health literacy had the lowest score as the limitation in health literacy was low educational attainments as well as the deterioration of visual ability which is a complication of the chronic disease (Reisi et al., 2016).

Diabetes self-care can be difficult as one has to be consistent with the management of administrating their own medication to ensure they are taking the right dosage and at the right time (Weinger, Beverly & Smaldone, 2014). Older adults need to be educated about taking care of their diabetes condition from exercise and nutrition to monitoring glucose level and taking their medication in a right portion at appropriate times throughout the day on a daily basis (Weinger et al., 2014). Weinger et al. (2014) stated exercise is beneficial if it is even as little as 15 minutes of walking after each meal.

Aerobic exercise can be modified to meet the diabetes person's needs or abilities, so they can participate in programs that focus on weight loss and flexibility of joints (Weinger et al., 2014).

Chomko, Odegard, and Evert (2016) stated that education of self-management is essential as it develops a control for glycemic level and weight loss. The diabetes epidemic has placed a heavy burden not just on the health care system but also on health care providers as well as the individuals affected and their families' members and friends (Chomko et al., 2016). The education development would be useful to manage diabetes in community practices to relieve the burden and establish a support system for the person with diabetes (Chomko et al., 2016). Chomko et al. (2016) agreed that due to the

various elements of diabetes self-care it could be hard for the primary care physicians to spend sufficient time with each patient on a routine visit to the office.

The approach to helping meet the needs of the clients with diabetes is to utilize ancillary staff if available in the clinics such as a registered nurse, nutritionist, social worker and pharmacist (Chomko et al., 2016). These professionals are capable of providing education for people with diabetes between visits to their doctor's office as this practice could successfully enhance diabetes self-care management (Chomko et al., 2016). The diabetes self-management education programs in community clinics are seen as an innovative way to promote the knowledge and understanding to improve care for people between a visit to their local clinics, medical home or associated care organization (Chomko et al., 2016). Chomko et al. (2016) explained that the recent analysis demonstrated some encouraging signs in the diabetes self-care management education program as weight loss was associated with the program regardless of the improvement in glycemic control. Clinicians and diabetes educators are not surprised with the results as they have experienced an association with improvement in glycemic and weight gain outcome because of a decrease in glycosuria and the side effects of hypoglycemic treatments (Chomko et al., 2016). Sherr and Lipman (2015) suggested that diabetes educators strive to meet the needs of people with diabetes as the service provide prevention and education for diabetes management. The program continues to engage individuals who are diagnosed and newly diagnosed with diabetes to develop self-management skills that make individuals maintain competency in monitoring their everyday routine and controlling glycemic (Sherr & Lipman, 2015).

Social Support and Diabetes

According to Wiebe, Helgeson and Berg (2016) psychologists are equipped to inform the scientific and medical community about social relationships that foster diabetes management through the lifespan. Self-management is crucial as it reduces complications related to type 2 diabetes and promotes the quality of life (Wiebe et al., 2016). The practice of self-management care is most effective with a close, supportive relationship (Wiebe et al., 2016). Individuals with type 2 diabetes are experiencing a longer life expectancy, and it is a necessity for them to understand how to use support resources and enhance diabetes management (Wiebe et al., 2016). Altering one's social world to cope with diabetes is crucial because support from many sources is vital for the individual to transition. These supports come from family, friends, peers, spouses and health care team (Wiebe et al., 2016). Wiebe et al. (2016) explained that support from family members is a significant predictor of diabetes outcome in emerging adults. Diabetes is prevalent in the United States primarily among the older population, and it is critical in managing blood glucose to reduce diabetes-related complications (Khan, Stephens, Franks, Rook & Salem, 2013). Some of these complications are cardiovascular disease, visual loss, and amputation (Casagrande et al., 2013; Ding et al., 2017; Khan et al., 2013). Khan et al. (2013) suggested that the married couple shared the management of illness and the spouse involvement in diabetes could take the form of social support. Evidence shows that involvement in physical activity is more challenging for adults who have type 2 diabetes (Khan et al., 2013).

The power of social support provides an affirmative that these efforts sustain and maintain healthy behaviors (Khan et al., 2013). Coping strategies could be influenced by natural support from spouses, families, and friends, leading to a successful transition in behavior modification among people with diabetes. It is clear that successful management of type 2 diabetes could only be accomplished through self-management behaviors (Mladenovic, Wozniak, Plotnikoff, Johnson & Johnson, 2014). These practices include performing blood glucose testing, following a healthy diet plan as well as being physically active (Mladenovic et al., 2014). Mladenovic et al. (2014) stated that evidence-based lifestyle intervention target individuals with type 2 diabetes. Diabetes complications have consistently shown a prediction of emotional distress, but social support is a psychosocial resource that improves physical and mental health (Baek, Tanenbaum & Gonzalez, 2014). This process is designed to provide help to others as diabetes-related burden could lead to emotional distress (Baek et al., 2014). The quality of social support demonstrates an effective adjustment and decrease emotional distress (Baek et al., 2014). A systematic review of social support interventions with type 2 diabetes indicates that such approach could be a beneficial technique to develop glycemic control, self-care and the psychological well-being of the individual (Baek et al., 2014). The theory of (Baek et al., 2014; Miller & DiMatto, 2013;) explained that social support from family and peers provides practical help and could buffer the stresses that come with an illness like diabetes.

Overview of Recent Studies

The overall review of the recent research indicated that diabetes is currently a global epidemic that could slowly reduce the quality of life with no consideration for age or gender. The reviewed literature discussed in this proposal involves analysis of Blair (2016), Casagrande, et al., (2013), De Groot et al., (2016), Ding et al., (2017), McQuiston et al. (2014) and Marin-Penalver et al., (2016). Many of the authors cited in the review demonstrated results that revealed factors leading to diabetes as well as the need for developing more intervention to improve care for females who are homeless and diabetic. The importance of healthcare routine checks was expressed in the review as it could lead to getting diagnosed and receiving treatment for diabetes before the complications of it become fatal. Acknowledging differences between cultures can be vital to promote dignity and trust with females who have diabetes and clinicians who are providing care services.

Beckles and Chou (2016) argued the increasing amount of diabetes mellitus incidence in the United States since the mid-1990s. Ranasinghe et al. (2015) spoke of diabetes as a leading cause of morbidity and mortality across the world with 80% of the affected population living in developing countries. The chronic health conditions that are related to diabetes have a tremendous impact on the quality of life (Ranasinghe et al., 2015; Shields, Baxter & Mani, 2016). De Groot et al., (2016) explained that type 2 diabetes disorder is a representation of demanding biopsychosocial challenges for everyone with the disease as it impacts their families as well. The etiology of diabetes is an autoimmune disorder that depletes the pancreas of the insulin-producing cell (De

Groot et al., 2016; Lucherini,2016). This allows the disease to cause a lack of insulin and the body cannot create energy from glucose (Lucherini, 2016). The network of social support system could lead to positive coping skills creating an increase in self-care and adherence to a therapeutic regimen (Shamsalinia et al., 2016). This kind of health behaviors could result in the reduction of complications to improve the quality of life (Shamsalinia et al., 2016).

Summary

Diabetes is a chronic health condition that is affecting the population worldwide, creating a burden that has impacted society both financially and emotionally. This disease does not seem to be preventable but can be maintained through effective interventions. Diabetes mellitus is associated with several complications, and if it is not adequately taken care of, it could result in decreasing the quality of one's life. The fight against diabetes is quite a challenge, and not only requires the assistance from the professionals but also for the individuals who are affected and experiencing this chronic disorder. The awareness of diabetes needs to be promoted beyond the corners of the earth but also through the mountains and cracks of the villages. The knowledge must be shared through education and interventions in a transparent manner so that everyone will be involved in this life-changing event. The idea of making changes and adapting to new principles to eat healthily and become more active physically should be the goal for everyone. The food industry also needs to play a part in the modification of sugar or sweetener to lower the risk of intake and improve healthy consumption. Lifestyle change is beneficial in treating this disease along with the administering of medications. Studies

show that obesity is associated with diabetes and healthy diet is essential. Therefore, the promotion of healthy eating habits could help in the prevention of some of these complications that are linked to type 2 diabetes.

Chapter 3 focuses on the research design, the research sample, the data collection methods, the data that were analyzed and the ethical considerations of the voluntary participants.

Chapter 3: Research Method

Introduction

The purpose of this qualitative study was to explore and understand the experiences of older women with type 2 diabetes who are homeless. I used a qualitative method to identify and describe the meanings of the lived experiences of these homeless women. This approach helped me to reveal insights from the women's views about how they are dealing with the disease.

In Chapter 3, I describe the study's research design and its alignment with the research questions. Specifically, I describe my role as the researcher, the voluntary participants, the setting, the data collection method, and all the ethical considerations I took to protect the study participants. I also address any issues related to trustworthiness and ethical procedures of the research to ensure its credibility and dependability.

Research Design and Rationale

I used a qualitative phenomenological approach to a case study design. Researchers can employ this method to gather participants' comprehensive descriptions of their experiences (Moustakas, 1994). Moustakas (1994) explained that researchers use the approach to elucidate phenomena as they manifest themselves through interpersonal psychological closeness between participants and the researcher. That is, researchers use the phenomenological approach to describe the experience itself in a comprehensive manner (Moustakas, 1994). According to Hancock and Algozzine (2015), a phenomenological study is a qualitative study that explores the meaning of several individuals' lived experiences around a particular issue or phenomenon. This assumes

there is a central meaning of the experience shared by the individuals that could be investigated and explained through research (Hancock & Algozzine, 2015). Hancock and Algozzine stated that the person's experience could be analyzed to describe the central meaning or the essence. Hancock and Algozzine (2015) defined a case study as an intensive analysis, which is a description of a single unit bounded by time and space. I used triangulation in this study as the methodology leads to a broader and deeper understanding of the participants' experiences. Denzin (1978) defined triangulation as time, space, and people. A topic can be examined by case study if it involves individuals, groups, or events (Hancock & Algozzine, 2015). The use of a case study allowed me to obtain an in-depth understanding of the situation as well as meaning for the individuals involved (Hancock & Algozzine, 2015). Yin (2012) suggested that a case study could be useful in exploring and explaining a phenomenon among a selected group of individuals.

Applying the phenomenological approach to a single case study design helped me to identify the issue, which is the unit analysis or participants with a phenomenon and draw attention to the situation. I used this strategy to conduct all interviews and increase the reliability of this study. The steps to complete this study included developing the research questions, gathering field notes which were the live data, and data analysis and interpretation to explaining the experience.

According to Husserl (1970), phenomenological research explores themes and details comments about the participant's situation that do not link to generalization like survey research. This research design allowed me to explore the lived experiences of older homeless females with type 2 diabetes in a transparent manner to add validity to the

study. Therefore, the reader can go through the results of the study and see how I arrived at the interpretations. I explored similarities from the unit analysis about their experiences managing type 2 diabetes efficiently in a homeless environment. A phenomenological researcher studies the individual's lived experience and aims to synthesize the meaning and describes the experience itself (Moustakas, 1994).

Yin (1994) defined case study as an empirical inquiry that investigates a phenomenon within its real-life context. The case I studied was older homeless females with type 2 diabetes, which is a unique group at this time in their environment. Case study design was selected because it helps the investigator to collect data using qualitative techniques such as semi-structured interviews. I gathered the information was gathered from a social group of homeless women through semi-structured interviews and analyzed by using an interpretative phenomenological analysis.

Research Questions

In this study, I explored the experiences of older females with type 2 diabetes who are homeless. The following research questions guided the study:

RQ1: What is the experience of the older homeless women with type 2 diabetes in an environment of a shelter or homeless campsite?

RQ2: What kind of support do the homeless women have from clinicians through their lived experience in a shelter or campsite?

RQ3: How do the women describe their barriers encountered when they seek care in the community?

Role of the Researcher

I participated in the research as the interviewer and was responsible for recording the information revealed to me by the interviewees. Moustakas (1994) stated that qualitative researchers have the opportunity to interpret what is heard and seen as well as what is understood. I applied Moustakas's principle to use the eye and the mind to absorb the data from my experience. The interviewer's interaction with the participant offers the opportunity to build rapport, acceptance, human dignity, and respect (Vanderstoep & Johnson, 2009).

I did not anticipate any conflict of interest during data collection. I had no personal or professional relationship or encounter with the staff or the clients at the shelter for women and have not I served as an employee or volunteered at the facility. The primary source of the data was interviews with the participants from the shelter. I asked questions about their experiences managing glycemic levels to monitor type 2 diabetes. These were semi-structured interviews with open-ended questions that I used to gain in-depth data while working to suspend all biases or judgment (see Moustakas, 1994). I also used probing questions to work with the participants to clarify and corroborate the meaning of their experiences with type 2 diabetes.

I audio-recorded each interview and made field notes with 15 participants. Yin (1994) mentioned that qualitative data come mostly from interviews and documentation. I paid attention and listened carefully to give the participants time to think, and I maintained awareness of their nonverbal signal and even eye contact. On completion of each interview meeting with a participant, I slowly transcribed the recorded audio to

organize the context and used a code name to protect the participant's privacy and confidentiality.

Recruitment

In this qualitative study, I used a phenomenological approach to explore the experience of the selected participants in northeastern area of the United States. The recruitment took place at a shelter for women and family in the center city of a small town. I employed a purposive sample to select participants who shared a knowledge of the phenomenon (see Guest, Namey, & Mitchell, 2013). The recruitment process was conducted after receiving approval from the Walden University Review Board with the number 05-21-18-0392773 and permission from the shelter manager to distribute flyers in the lobby. At the shelter, the women were free to look at the flyers and take one if they were interested in participating in the study. After I was granted permission to distribute flyers (see Appendix A) about the research in the main lobby at the facility, participants were allowed to contact me. The flyers had my contact information for the voluntary participants to call or email me to participate in this study. The participants were able to reach out to me individually by phone, email, or even by having an office staff member at the shelter notify me and I would visit the facility to communicate with them at their request. I shared with them information about the study once they contacted me and met the criteria.

Sample Size and Eligibility Criteria

The study participants were homeless females living in the same county and in one shelter for approximately 2 weeks who had type 2 diabetes. Semi-structured

informal interviews were conducted with 15 participants from the county area. Previous studies showed that qualitative research using interviews may have a broad range in the numbers of participants, from 12 to 101 (Fugard & Potts, 2015). I aimed to obtain data saturation when all primary variations of the phenomenon have been recognized as well as incorporated into the emerging data collected and not obtaining any new information. According to Bertaux (1981), 15 is the smallest sample size that is acceptable. Reid, Flowers, and Larkin (2005) suggested that qualitative researchers usually work with small sample sizes. My primary goal was to make sure the sample size was small enough to manage the material and large enough to create a new and rich texture to understand the experience (see Fugard & Potts, 2015). Fugard and Potts (2015) also recommended that for small projects, 6 to 10 participants could be interviewed.

The participants were located at the local shelters for women and families from the inner city where I distributed my flyers. There are two locations of this facility with 110 women at each campus. These shelters house the women for up to 6 months. Some of the women are transitioned to temporary homes and then move to permanent housing. Those who do not obtain temporary housing are encouraged to participate in a training program that prepares them for gainful employment. The study sample consisted of a purposeful sample 15 women with type 2 diabetes in the age range of 55 years old to 64 years old. The criteria required voluntary participants to be at least age 55 years old and not older than age 64 years because this specific age group is close to retirement age. According to the WHO (2017), a person at this stage is near the end of ongoing contribution. All participants had to identify themselves as a homeless person who has

been diagnosed with type 2 diabetes mellitus and has resided at the shelter for at least 2 weeks. The voluntary participants could be insulin dependent or noninsulin dependent with diabetes, and regardless of whether she was under the care or supervision of a physician. The participants could be employed or unemployed, but must have been registered with the shelter as a homeless person. The study sample was selected from any ethnic groups as long as she lived in the shelter. The criterion includes any of the women who are the age of 55 but not older than the age of 64 years old. My alternative plan was to reach out to professionals at the local health clinic called Street Medicine that is supported by the local hospital in the valley. The Street Medicine clinic serves the homeless population in the area, and I sought their permission so they could help to share my flyers with their clients to enable me to achieve the sample size of 15 in case that women at the shelters were reluctant to participate.

Data Collection

I collected the qualitative data through in-depth interviews that were scheduled for the convenience and comfort of the voluntary participants. I used the case study design and phenomenological approach to help me obtain a better understanding when I am making sense of the information collected. The data collection for this study was conducted through oral submissions from 15 participants in face-to-face semi-structured informal interviews with me as the interviewer. I used a folder for each participant with a codified name to represent their name and protect the individual identities.

These folders all have notes that I had written down during the meeting at each interview and a 90-minute audio cassette that was used for the audio recording. The

material related to each of the participants was filed in individual folders and stored in numeric order in a filing cabinet locked with a key, and the key is secured in my possession at all times. The recording device is locked up as well in the filing cabinet to preserve confidentiality for all 15 participants. After each interview, I organized the information while it is still fresh in my mind. I checked the batteries on my recording device and put in a new cassette for each participant.

The first step for this the process took place after the approval was received from the Walden University Institution Review Board. The letter of approval from the Institutional Review Board (IRB) with the number assigned by the Walden University. The letter of cooperation sample from Walden University website was modified with approval from the university to insert the relevant name of the shelter that accommodated the study participants. The informed consent from the University website was modified with the approval of the Institutional Review Board. This consent form was first presented to the participants before the start of the interview meeting. During a 6 to 11 weeks period, I scheduled and conducted all field-based research activities which included meeting and interviewing the volunteer participants.

The informed consent form was used to gain permission from each participant to conduct the interviews which was a part of the study. When the shelter manager agreed to the study, I placed flyers in the facility. The next phase I prepared my method which is an audio recorder to ensure it is working correctly and run tests with the cassette recorder. I checked supplies to ensure enough notepads to make notes of anything significant and watched behaviors. The face-to-face sessions lasted 30 to 45 minutes. The protocol for

the interview (Appendix B) provided guidance to the process of open-ended questions. The interview sessions gave the participants an opportunity to elaborate in their own words. Singleton and Straits (2005) suggested that open-ended questions are essential when eliciting information or opinions from individuals with the knowledge about subject matter. I organized, reflected and put the text into a contextual form based on the interviewee's opinions. I played each cassette audio several times to ensure accuracy.

Protection of the Human Subjects

The women were asked to read and sign an informed consent form voluntarily before any interview session. The consent form had a clear explanation of the study that was conducted, the benefits as well as all possible risks was slowly explained. I explained to the participants about the duration of time that was required for the interview study and the participant's right to withdraw from the study at any time as outlined on the form. To establish leverage of trust, I also explained to the participants that if she feels uncomfortable in any way, she can withdraw from the study. I further explained that the services offered to them by the shelter would not be affected and all interviews will be conducted in privacy. I highlighted the crisis center telephone number on the consent form and assured the participants that they could call at any time to speak with a counselor. Further steps were taken to ensure each participant's protection as this study required approval from the Walden University Institution Review Board and I had to participate in a web-based training course that protects human research participants.

Confidentiality

Confidentiality was guaranteed by carefully securing all paper forms in a file

cabinet that I kept locked, and the key is in my possession at all times. All electronic versions are upload to a secure website with a password. The data collected is stored on an encrypted flash drive that I locked in the filing cabinet located in my home. I am the only person who has access to the data. There are no outside parties that contributed any funds or other sources to this study, and therefore no conflict of interest existed. The volunteers who agreed and participated in the study received a \$15.00 gift card from Subway restaurant. It was my way of showing appreciation for their time. I also explained to the participants that all records of this study would be destroyed in 5 years after the date that the study is approved as specified by the Walden University Institution.

Trustworthiness

An essential part of the objectives of this study all the participants were treated fairly and with respect to protect their interest. None of the participants was subjected to any physical or emotional harm. There were no ethical issues related to the participant's health that was affected. The credibility of this qualitative study solely depends on the trustworthiness of the information presented. The dependability, transferability, confirmability was to create credibility and trustworthiness of the information.

Gieryn (1999) explained the utilization of empirical illustrative evidence and boundary could define and anchor a conception. According to Gieryn (1999), the connection to reproduce science is the legitimate power to define the real. The opportunity gives knowledge makers a chance to present their claims as credible, reliable and trustworthy by composing the claims in a changing contingency on immediate

circumstances (Gieryn, 1999). The precise opinions and views of all the participants represent a reliable legitimate explanation of their reality.

Yin (2003) stated that a case study could be considered when to answer how and why questions. Therefore, I did not choose to manipulate the behaviors but to discover the contextual conditions that were the participant's experiences with type 2 diabetes. In this study, the case was the older homeless female mechanism in monitoring their glycemic levels. But my focus was on the experiences of the women who are homeless with type 2 diabetes.

I utilized time and place to make boundary works. Yin (2003) and Stake (1995) argued that placing boundaries on a case could prevent the explosion from happening which is the pitfall. The boundary guided my focus to study what I need to explore, and the goal was to know how the women experience type 2 diabetes while living in their environment. Silverman (2016) explained that confidentiality is a means of being obliged to protect the participant identity and location in the study. The value of trust and ethics are connected especially when the data collected concerns a production of real situations (Silverman, 2016).

Validity

According to Golafshani (2003), qualitative research uses a naturalistic approach and aims to understand phenomena in a real-world setting. Results from a qualitative analysis are a different knowledge from quantitative inquiry as one person argues from the underlying philosophical nature like interviews and observations (Golafshani, 2003). The study report was neutral in order to be worthwhile as the choice must cut to the core

or from the heart where the meanings and not the frequencies assume paramount significance (Kirk & Miller, 1986). Kirk and Miller (1986) stated that seeing the same thing from more than one perspective gives a fuller understanding of depth. Interpreting the noted experience of the participants was done by interacting with them and studying their language in their own setting. Reflecting and making sense of what the participant perceived can reveal a pattern of social life (Kirk & Miller, 1986). I was the informant of this study, and it was my responsibility to ensure that I carefully transcribe the audio recorded version of the participant's responses. I used this opportunity to ensure accuracy and identified categories and themes. Therefore, I chose to work with the information hands-on and without the assistance of any digital software. I was able to hear every word and understand it the way the participants sensed it in their natural setting.

Transferability and Confirmability

Transferability and confirmability are goals that the study sought to achieve by demonstrating a level of neutrality in the findings. The findings are based on the participants' opinions and not from any potential bias or no personal motivation from the investigator. I ensured that my bias did not interfere with the interpretation gathered from what the volunteer participants said to fit in any narrative. Trustworthiness was described as a criterion to test the quality of research design (Yin, 1994). However, Guba and Lincoln (1989) refer to trustworthiness as a goal of the research. As a qualitative researcher, I created an audit to demonstrate the steps taken to analyze the data that was developed in order to show a rationale for any decisions made. Such a strategy helped

me to show that the findings from the study portray the precise response from all the studied participants.

Transferability in the study showed that the findings could be applied to other similar situations or populations as it provided sufficient details of the context from the field notes to justify the findings. Morse et al., (2002) explained that the essence of obtaining reliability and validity is the iterative and interaction with data and analysis. The collection and analyzing of data concurrently create a mutual interaction between what is known and what needs to know (Morse et al., 2002). It was my responsibility to explain how the interpretations were discovered and shared the meaning of the experience. I faithfully and rigorously practice the principle of a qualitative method to incorporate reflection and precise data collection. I verified the information of the participants by combining the method of case study and phenomenological approach to ensure consistency and reduce bias or misrepresentation.

Qualitative Analysis

Giorgi (2009) suggested that a phenomenological description focuses on how the participants perceive their experiences and eliminate any biases that could influence the study. The analysis helped me to pay close attention to the information gathered from the voluntary participants during the interviews. As the informant, I patiently and carefully played back each cassette to comb through the information. This way I had hands on the real perception of the participants. I carefully analyzed categories to identify and determine similar themes. Personal biases were omitted as my primary focus was only the experiences shared with me by the homeless women with type 2 diabetes mellitus.

Dey (2003) suggested that qualitative analysis could result in a substantial emphasis on rigorous analysis to apprehend a meaning. The skills of this analysis require one to perceive and present on the other hand it is like learning and doing (Dey, 2003). The process to search for corroborating evidence is a crucial feature of this analysis, and it is an essential part of the production of sufficient accessible account (Dey, 2003).

Summary

Chapter 3 was created to describe the method that was used in this study. A phenomenological approach is used to address the exploration of the experience of the older homeless women with type 2 diabetes mellitus. The qualitative inquiry was selected as a reliable tool along with the scientific instrument of triangulation. The triangulation strategy created an outcome of the validity of the final product. The importance of this qualitative inquiry was deemed to bring no harm or discomfort to any participants that are greater than their regular meeting on a daily routine, however, and whenever the data is collected. Chapter 3 explained the internal and external validity of the study. The internal validity assured the quality of the design while the external validity focuses on the outcome of the study to ensure it connects to other population group or situations. The utilization of case study and phenomenological approach triangulation is a suitable strategy to establish credibility in the qualitative analysis. The combination of methods helped me to overcome the possibility of any natural biases or problems that one method could cause. This principle has allowed me to describe the meanings of the lived experience of the older homeless women with type 2 diabetes mellitus and to study them at the same time as a single unique group.

Chapter 4: Results

Introduction

In this chapter, I present the experiences of older women with type 2 diabetes who are homeless. I selected a qualitative method and used phenomenological approach to describe the experiences of women with diabetes who are homeless. The purpose of this study was to collect data from 15 women who live in the setting of a shelter that houses homeless women. I used face-to-face interviews with open-ended questions and analyzed the data. I developed three research questions to obtain a better understanding of the phenomenon.

RQ1: What is the experience of the older homeless women with type 2 diabetes in an environment of a shelter or homeless campsite?

RQ2: What kind of support do the homeless women have from clinicians through their lived experience in a shelter or campsite?

RQ 3: How do the women describe their barriers encountered when they seek care in the community?

Setting

All participants willing and voluntarily participated in the study after signing a consent form. I was given permission to distribute flyers in the lobby at the shelter for women and families. The participants all had resided at the facility for more than 2 weeks. The interview meetings took place at the facility in the private office used by the caseworkers. I created an interview guide (Appendix E) which consisted of 14 open-ended questions. I reminded each participant before each of the meetings that they would

be recorded. Based on the rapport I established with the women during the phone conversation and consent meetings, a lengthy introduction was not necessary. A purposive sample was used because the participants all experienced the same phenomenon.

Demographics

There was a total of 15 participants, all of whom are women and resided at the shelter in the northeastern area of the United States. The age range was from 55 to 64 years old, and all were officially diagnosed with type 2 diabetes. All participants received a copy of the consent form with the telephone number for the County's Crisis Center for them to call and speak with a professional if they felt uncomfortable. Fourteen of the women had lived at the facility for more than 4 weeks, and one was housed there for 5 months. The minimum age of participants interviewed was 56 years old, and the maximum was 63 years of age. Seven of the participants were Caucasian, 6 were African American, and 2 were Puerto Rican. All spoke fluent English. Ten of the women were unemployed, and 5 of them were employed. Table 1 summarizes the participants' demographics.

Table 1

Participant Demographics (N=15)

Participant	Ethnicity	Age	Employed	Duration in shelter
C01	Caucasian	63	No	5 weeks
C02	Puerto Rican	56	No	4 Months
C03	Caucasian	60	Yes	6 Weeks
C04	Caucasian	60	No	1 Month
C05	Puerto Rican	58	Yes	6 Weeks
C06	Black	58	Yes	7 Weeks
C07	Black	62	No	5 Months
C08	Caucasian	60	No	3 Months
C09	Caucasian	63	Yes	4 Months
C010	Caucasian	62	No	2 Months
C011	Caucasian	62	No	9 Weeks
C012	Black	63	No	4 Month
C013	Black	60	No	7 Weeks
C014	Black	59	No	3 Months
C015	Black	61	Yes	6 Weeks

Themes

Phenomenological researchers explore themes that emerge in the detailed comments of the participants (Husserl, 1970). I created a structure of nodes and then commenced with identifying the themes. The structure of the node was created as I went through the audio tape recordings. This connected the participants' responses to the real world with the thematic idea which captures their experience. I carefully focused on the frequency of keywords by comparing and contrasting. I listen to the audio tapes repeatedly and utilized this strategy to ensure accuracy in transcribing the collected information. I then wrote the emerging themes on paper. After each interview, the transcription was completed and read over and over for consistency to create the structure of nodes that lead to the themes. The nodes constructed were based on verbiage, and the themes were then derived from the exact word from participants.

I carried out a qualitative analysis to find emerging patterns from the nodes that I used for the themes. This allowed me to put each word in context, just as how the respondents stated it and meant for it to be said. This practice decreased bias, as only the views of the participants were essential to be recorded and transcribed, so themes incorporated the exact views of the women who participated in the study. Table 2 demonstrates the nodes that were cultivated by transcribing the information and the themes developed from the transcriptions.

Table 2

Nodes Created from Transcripts that Leads to Themes

Nodes	Themes
Diabetes care	Experience
I feel like I am not normal	Experience
Glucose not normal	Experience
The body cannot make insulin	Experience
Monitor the disease	Manage/Cope
Must have a lifestyle coach	Manage/Cope
Need health Aides	Manage/Cope
Speak with the doctor more	Communication
Talk with patient	Communication
Mentor to guide patient	Communication
Follow up regularly with the patient	Self-Care
No activities/exercises	Self-Care
Lack of privacy	Self-Care
No support groups	Self-Care
Store medication	Self-Care
Lack of sanitation	Self-Care
Must teach patient about diabetes	Education
Must teach about blood sugar	Education
More about the medications	Education
Learn to control weight	Education
Learn about food groups	Education
Better treatment	Improvement
More help from the community	Improvement
Believe in God	Motivation
Believe in hope	Motivation
Self-betterment	Motivation
Lack of healthcare	Barrier
Lack of health insurance	Barrier
Lack of housing	Barrier
Lack of education	Barrier
Lack of monetary funds	Barrier
Not getting regular checkups	Barrier
Lack of communication	Barrier
Lack of employment	Barrier
The bosses don't understand	Barrier
Lack of transportation	Barrier
Lack of diabetes education	Barrier
Not enough information on diets	Barrier
Lack of literacy on health	Barrier
Lack of trust	Barrier
Self-fear	Barrier
Mental stability	Barrier

Experience

The respondents all stated that their experiences with type 2 diabetes is a difficult journey because they had no knowledge of the disease or even the word diabetes until after they were diagnosed by a doctor. The women all stated that they did not know they would have to worry about type 2 diabetes because all they were worried about was having a roof over their heads and a place to be home. All of them mentioned that they knew that as one gets older, things happened, but they had no clue diabetes could happen. All 15 participants stated that when they heard about diabetes, they were astonished. One participant stated that when she first heard of diabetes, she was wondering if the doctor was sure or just making stuff up to get the money that she did not even have.

Participant C01 said that her experience with diabetes was somewhat of a shock to her when she found out. She stated,

I was homeless, you know, living on the streets and one night I remember I was so hungry and started searching in the trash bins around the restaurants looking for food. Girl, I went to the bin, and I did find some food, so hungry I eat right there. Climbing back out of the bin I fell and cut my knee, it was bad, and I don't know, but a friend I had who live at the end of the street helped me. I manage to get to her house, and she gets me to the emergency room as it was bleeding bad.

The doctors did what they have to do, you know and stitched up the knee, this left knee. When he told me, I have diabetes; I was like dia what? He told me a little about it and said they are going to give me medications and I need to follow up with my doctor. This was 2 years ago, my knee took forever to heal, but I did

not follow up because I could hardly move around. But since I am here at the shelter, the caseworker helps to see a doctor and they now trying to help me to see the diabetic nurse. It is not easy as I like my Pepsi and now, they are telling me I cannot have soda. The nurse gives me a special diet, and I cannot always follow it as I eat what I can get and I am not working, you know. I often times get dizzy as well and don't get to eat on time.

C02 stated that her experience with diabetes is rough because she has to go to the clinic every month to get her insulin. She reported,

Now that the weather is warm, I can walk to the clinic at the hospital, but in the winter months, I cannot make it. I am having trouble to manage this disease because I smoke and the doc wants me to stop smoke. I have known my grandmother had diabetes, but I never think I could be diabetic also. Sometimes I don't get to eat, and I just feel so sick and weak.

C03 reported that she works and has to go to the bathroom often to urinate and sometimes the supervisor would think that she is goofing off on the job. She noted,

My experience with diabetes is not easy at all, as the regimented diet, I cannot afford it. Now, I have to worry about it instead of having my apartment. Then people think you are careless to be homeless and cannot be able to afford a house. And then, the doctors them, don't even take time out to make things simple, so I can understand it. They want to use their big word, and I don't always get to see the diabetic nurse that comes here once a month. To have type 2 diabetes is one thing but to maintain it is another thing because it is expensive. There should be

more help for us because all doctor wants are to give you a prescription. And how many of us can fill it? But diabetes has helped me to be a bit more responsible for taking better care of myself.

C04 stated she was terrified to know she has diabetes because she had struggled with her weight since she was a teen.

Now I am older, it's not easy to move around. The first thing the doctor tells me was that I have to lose some of the weight. But being in a shelter, I am limited to the special diet as I cannot cook what I may want to cook. I have a daughter but her husband does not want me at the house, and she helps me sometimes with my meals.

C05 stated, having diabetes is a challenge, and now she has to worry about it as if diabetes is a child. Participant C05 continued to say,

And I don't have a child. With my little job, I get to fill the medications at times, and I don't worry about exercise as the job keeps me on my feet all day. When I was diagnosed, I know nothing about diabetes. I was having some of the symptoms but did not have any idea until one of the ladies at the soup kitchen tells me to go to the hospital. Thank God I have insurance from my job, but it is a struggle as some days I am fine, and some days I feel like hell. But as time goes by, I learn a little more about it [diabetes], and I try to do the right thing to manage it and reduce my dizziness. My caseworker who visit me here now have a diabetes nurse who comes in, and I am lucky to talk with her sometimes, and she helps me to understand it [diabetes] a little better. I work and don't always

get to do my follow up visit at the hospital, so I am happy I get to speak with the nurse when she comes. With my age now, I don't always remember what the doctor said. But all these paper materials they give me I don't have time to read it. So, it's not a piece of cake at all; it's a lot to do and worry about when it comes to diabetes.

C06 stated, when the doctor informed her about diabetes, she felt he had given her a death sentence.

It is a baggage I have to carry for the rest of my life. They called me a frequent flyer at the hospital because I trouble with high blood pressure and when the pressure bothers me, I have to go to the hospital. The diet is so strict, and I love my fry chicken, now can't have anything fry. I have to change my lifestyle, can't drink any alcohol and I have to drink less soda. But sometimes that is all I have, a soda and who can tell me I cannot have it then. Me not having my own place make it worse as sometimes people take my stuff when I went to work and you don't have what to eat or drink. I know just a little about taking care of diabetes, and I can't stand the other people in the shelter. They have no respect for my personal belongings.

Participant C07 said:

My experience is that my body doesn't make insulin and I feel so sick at times. I don't feel normal, and I cannot eat anything, but sometimes I don't have a choice of what to eat. It is a burden, and I cannot get a job due to me not having the right skills. The Catholic charity helps me to get Medicaid, and I get my meds without

having to pay co-payment, but it's hard someday to reach the doctor for my regular checkups. I don't always think that I have diabetes because it makes me feel so helpless and I cannot do much to control it or manage it.

C07 expressed appreciation for the Catholic charity office as this non-profit organization seeks to assist the homeless population in the local area.

Participant C08:

This disease has affected my life in every way because I don't know how to care for myself properly. I don't have a house or apartment, no husband or boyfriend to help me. The shelter here can only do so much, but this thing cost money that I don't have, and it is very discouraging. Especially at this stage of my life, I am tired of struggling not making enough money and so I hate to work as it only puts me in more debt. It drives me crazy that I have to pay for everything. But when you have nothing, it is hard to do something, so my sugar level is always high, and I am always so stressed.

Participant C09 said:

Living with diabetes, I try to follow up on my diabetes care to the best I know how. Because I want to live to see my grandbaby go to high school and end up being better off than I am now. Being homeless is one thing but having to live with type 2 diabetes is worse. It's too much rule to follow, but I try to keep up. I may not do everything every day, but I try my best to do better and make a good choice every day. Some days I feel like I got hit by a bus, but I take all the help I can get to stay alive.

Participant C10:

I try not to freak out about it and do what I understand to take care of my diabetes. Hey, I can tell you though, that it is like a monster that sits on you for the rest of your life. I don't get to see my doctor all the time, but I try to watch how I eat and when I don't have my medicine it gets me anxious and stresses me out. I have to check my sugar level every day, and it is a pain to remember to fingerstick myself.

Participant C011 lamented that she was diagnosed with type 2 diabetes a year ago, but it has been a struggle since then. She exhaled heavily and then continued:

My life is not the same and will never be the same again. This disease has changed my life, and sometimes I don't feel normal or have a taste in my mouth when I am eating. Sometimes I don't know what to eat, and I am supposed to go for a checkup every three months, but there is a time when I cannot make it. The bus leaves me, or I forget about the appointment as I worry about where I will sleep or what I can eat. Sweetie, don't get old.

Participant C012:

Taking care of my diabetes is hard and the medicine the doctor gave me to control it often times make me sick to my stomach when I first started taking them. My blood sugar spikes all the time, so now I am taking medicine for my diabetes and my blood sugar levels. It is a pain because sometimes it seems like I take more medication than how I suppose to eat food. I try to exercise because I walk to get to most places that I need to get to. It's sad because the doctor did not tell me it

would be this hard to take care of my diabetes. I am scared, but I just have to keep doing what I got to do to stay alive.

Participant C013 stated:

This diabetes has taken over my life! The doggone disease makes me feel so weak sometimes and them doctors don't seem to care. They tell you about all these medicines to take, and some are so pricey, and I cannot afford it. There are times when I have to take half the amount because I want my meds to last me. I see my insurance expired and these people [Welfare office] don't want to renew it because I don't have a permanent address. They gave it to me as an emergency the last time, but now it's a fight to get it, but my caseworker tells me she will try to help me to do the paper works again. I need it so I can get the medicine.

When asked about transportation, she stated.

With my bad knee getting swollen it's hard for me to go over their office every week. Taking care of my health is a challenge, and I am glad to be here at the shelter for now so I can focus on taking care of me.

Participant C014:

When the doctor first tells me about my diabetes he says, eat right, exercise and take your medication, as if it was easy. It is such a burden because I cannot afford to eat right or go to no gym. I work voluntarily at the community vegetable garden, but I don't have access to cooking. The soup kitchen down the road is not bad as I can get a little food over there to eat. The medication is another problem, as getting these meds are expensive to buy and only God, knows how I manage. I

try to go to the street medicine clinic on the third Thursday. Dr. B and his team are very nice; he always checks to see if I have sufficient medicine and he checks my blood sugar level. They make me feel good and encourage me to pay attention to my health.

Participant C015 shared that it is rough to have diabetes and to be in a shelter.

There is not too much of privacy, and I have to tie up my meds in a plastic bag as some people just got up in your stuff when you aren't around. I use to have a car to move around and get to my appointments at the hospital but now it's rough. The caseworker helps me to get a bus pass, but sometimes I miss the bus because I lost track of time or get off from work late. With little or no help, it is hard to keep up with the routine checkups at the hospital.

Manage/Cope

The processes that underpin the responsibility for an ecological problem are changes in one's lifestyle. Maslow (1943) said that the physiological needs call for physical requirements for one to be able to survive. The participants described difficulty in coping and managing their diabetes care as they illustrated the various strategies. The routine in diabetes care is a lifestyle that allows the individual to govern their daily tasks, like taking their medication in a timely fashion, exercising and eating a low carbohydrate diet.

Participant C01 said:

I am trying to manage diabetes to the best I know how, but it is a learning process. My problem is getting the diet thing down right. Coping with my diabetes is

stressful because when I get to do my checkups at the doctors, they are telling me that I can't do this and I have to do that. The routine is too much, and it is hard for me to keep up. I don't get enough exercise and most of the activities I do is sitting, like my knitting to get things off my mind.

Participant C013 said:

I take my meds as the doctor tell me to. I am not a great reader but what I don't understand I ask questions and try to move around most of the time. When I don't have the money to buy the right food, I have to worry about where the next meal is coming from; it is just a forever struggle. I depend on food stamp to get my food and pay attention to the amount of sweet and carbs that I eat. But I still have trouble to lose some weight though.

Participant C07 stated that managing her diabetes is a part of changing her way of eating, drinking more water and lessen the sweet stuff. She further proclaimed that managing her disease is hard, especially when it comes to the food that she should be eating.

The doctor gave me a glucose log sheet for when I check my glucose level as I don't get to go to the doctor ever so often. Honestly, I would sometimes forget to write it down on the sheet and cannot find the log sheet.

Participants C09 and C08 mentioned that managing diabetes without their own home is a big obstacle because the food is the number one thing. Participant C09 stated:

And they told me I have to exercise. But how crazy when you have to worry about the next meal, who can or wants to do any exercise? To get my medication

is even worse and so I can't do the way I am supposed to. The shelter gives one meal a day, and if you are not here at that time, you don't get it. I need glasses for my eyes, and I have to use a magnifying glass to read.

Participant C08 stated that she uses candies to get by some of the time.

I don't have a job, and so I don't have a routine to schedule breakfast or lunch. I don't have access to a refrigerator; only the people with children, get to put stuff in the refrigerator. To tell you the truth, to get food and shelter right now comes before my health. I don't have reliable transportation to get to my appointment on time.

Participant C06 said:

I work part-time and get a little help from Welfare with my insurance because if I get insurance from my job, I cannot buy food or save a little something. I have to invest in my health, so I have to check my glucose level and try to eat what is good for me. I have to try to go to all my appointments and try to understand how to take care of myself. Because doctors will only guide you, but they are not going to do it for you. I carry my hand sanitizer and test myself three times a day to make sure my glucose is not too high. I keep the insulin vial in my water bottle to keep it cool on days like today when it's so hot.

Participant C02 said:

My diabetes is managing me I swear. But the Catholic church and my caseworker try to help me. The church helps me to get meals and the caseworker give me bus passes and remind me to get to my appointments. I don't get to eat regular, like

how a doctor wants me to eat. I am not on insulins, but I take pills and sometimes I have to skip it so it can last because I don't want to bother my son who gives some money when he can because he has his family to worry about too.

Participant C03 explained:

I want to live long and hopefully get my own place. I get my exercise all right because I am always on my feet at work and sometimes I walk to my doctor's appointment if it is not raining. Everything is getting so expensive now; sometimes I don't have the co-payment for my medications. The situation only gets more difficult when I don't have a place to stay, very stressful when you are not safe. I try to keep snacks, so I have a little something to munch on all the time.

C04 stated, she gets so stressed out at times when she doesn't get to eat right or make it to her doctor's appointment.

If I don't have money, it's like I can't do nothing. I walk most days to look for work and food to eat. I have to carry me belongs with me too, so that is a work out by itself. The doctors should have health aides to come around and check up on people like us when they see we don't make our appointment for a while. But only the people with HIV disease - they go search and look out for them.

C05 said that she asked the doctor to give a different medicine as it was hard for her to keep the insulin vial cool because she did not have access to a refrigerator. "It was hard for me to hide my insulin with my food and I cannot take needles in the shelter either."

C014 stated that, she has very little control over her diet, and the food that she gets at the shelter is not healthy. She complained that it has fat, starch and sugar.

I don't have choices when it comes to what I am eating. The shelter gives us a little food, but not a lot of vegetables and too much gravy is served. When you are in a place like this, managing this disease called diabetes is impossible to do. First of all, if you are taking your insulin, needles cannot come inside the shelter; they do not allow it. It's a good thing I have one of those health benefit cards, and I can get my insulin shot at the pharmacy. I get my exercise by walking to the pharmacy, even when I have a bus pass.

C010 said:

I really need help to take care of my diabetes, and most times I believe that the community could try to do more to help us who don't have a place to stay. The soup kitchens around here do their best to make sure we are eating but who cares what diabetic people should be eating. I cannot do much with all the papers that the doctor is giving me. I can't follow the regime because I can't accommodate a proper diet or exercise regular according to what the doctor says. I am not saying I don't want to care, I do want to take care of myself, but when I have to worry where to sleep or what to eat, the thoughts of diabetes is gone through the window. That is why many of us just get worse where our health is a concern.

C011 talked about the hardship of obtaining life necessities which makes it very difficult to focus on taking care of her diabetes.

The rules and regulation that the doctor gave me sound like too much of a luxury. To take care of my diabetes is a stressor because I have to worry about the medications, activity to exercise, and check my blood glucose. It is a little bit too much to juggle at my age and no help. Thank God for my friend who encourages me to go down to the church to get my pressure check often and help me to get my medicine.

Participant C015 said:

I do my best and work full time to take care of my diabetes. I don't always eat well as I am trying to put something aside to get my own apartment. But I do make sure to get my medicine and take them on time. With exercising I get my fair share at work, I am always on my feet, six days a week and I like to stay busy. It is not cheap to manage diabetes, and I get insurance from my job but think of people who don't have insurance. I want to eat healthily, but when you are homeless, people just think you don't care. Regardless of my situation, I am trying because one can only keep trying.

C012 stated, she is an insulin patient but refuses to use it because she cannot take the needles in the shelter and does not have access to a refrigerator.

I begged the doctor to give me metformin, and I try to put water in my sugary beverages. I can't afford juices, so I have to put water in the soda and soda is cheaper. I can't buy fruit, but when I walk through the fruit and vegetable market, I manage to snatch (steal) one or two fruits. The shelter always offers bread, and I have to take it, better than nothing. To eat healthily is not easy and as a diabetic

person the doctor they always say that, but we need help. We must have a lifestyle coach to help us, so we can do better at managing our diabetes disease. Yes, some program with a lifestyle coach would be helpful because we need more help. Seeing a doctor is one thing, care is necessary too, and it's a nightmare to care for diabetes with no money or help.

Communication

All 15 lamented that communication was needed between providers and patients. They mentioned that at times they feel rushed when talking with their doctors and wanted to talk to the doctors more to understand their progress or how to take care of their diabetes better. All 15 participants complained that they got too many papers from the doctors with information about diabetes and sometimes they do not understand what they had read from the material. The participants claimed that doctors need to slow down when communicating with them because they do not always get all the information processed at once or have time to read all the materials with the literature that the physician provides.

C01 remarked:

My doctor does not always take the time to hear me out, what I have to say. He cuts me off sometimes, and I don't get to explain properly, as I get nervous or ashamed to even say too much about my situation. The doctor is trying to help, don't get me wrong, but they don't know what people like us have to endure. The choice of an alternative is not given to me because they don't know it is harder for us to have a good meal than even to visit the hospital.

Participant C02:

I go to the hospital to get my insulin, and the doctors help, but no one seems to care to follow up or locate me when I don't show up for months. I wonder if they think of me. I try to tell the doctor that I cannot manage the winter but he never really come up with any solution.

C03 said:

Doctors don't really have time to understand my situation they just want to push the drugs on me so they can move on to the next patient. Yes, the docs will be saying what and how to take care of my diabetes but the basis to help me they don't tell me really. They don't know I live a very basic life, nothing fancy.

C04 mentioned:

Them doctors need to understand the life of a homeless person, who don't always have the convenience of things. But just have to improvise to provide. They should make sure we have some kind of health aide to check on us in between visit. Especially, when we don't make the appointments often.

Participant C05 shared a similar story:

Doctor don't have time to listen to me, because they know I have no money, no insurance. The caseworker tries to be helpful but can only do so much because the process in the system takes forever for me to get anything free. The doctors should be more involved when it comes to caring for diabetic people.

Participant C06 shared:

I am always at the hospital because if I feel bad, I prefer to die in the hospital than on the street. So, it doesn't matter what they say to me. I follow up the hospital because they can't turn me out. They have to give me care!

Participant C07 stated:

Doctors don't always communicate in a manner for me to understand and it could be better, just have to hope for the best. Maybe if the relationship between patient and physicians was of trust and more stable, better use of care could be successful. They have to know we are basic people, not the luxurious type. Government needs to know too that for us type, not having proper insurance only makes it risky to manage with this disease.

Participant C08 also spoke about trust with the doctors saying that it would encourage the patient to want to visit more. She proclaimed that doctors could assist with recommending the help as needed. Such needed help is like a food source, caseworkers or social services, patient support and even community support. She went on to say all of them [diabetes patients] at the shelter talked all the time, that health care providers could give more advice about how to adapt to the care that they need.

Participant C09 elaborated that doctors could be more useful when providing care instead of just giving out a "bunch of papers".

They should explain it to us more by talking if they are concern about my health. Sometimes I am scared to ask a question because I don't trust they would give me the right answer. When you are sick and don't have a home that is a crisis, too much a burden.

Participant C010 mentioned that she has to stick herself to check her sugar levels and it was the nurse who taught her.

But the doctor and nurse help me to understand how to check my glucose levels.

When they see you are trying, they try with you but if you don't care they going to move on to who need their help.

Participant C011 said:

I think the doctors are trying to help, but it is frustrating for them as well as me to stick to a low carb diet and get the meds. But they don't always talk in a language for me to understand. They talk their doctor language.

Participant C012 shared:

Doctors can spend a little bit of time to explain my care and how to take my medicine. But after a while, I forget about the time I should take it because I have to worry about my belongings for people not to take it, have to worry about what to eat and drink. Having follow-up care, like an aide to come by the shelter or seek out people who cannot make it to the clinic for appointments could be more useful.

Participant C013 explained, "I don't have a problem with my doctor, they don't spend a lot of time to talk, but he makes sure I am not leaving without my script to pick up my medicine."

C014 stated that communicating with her doctor is not always easy because she goes to the hospital clinic and every time it is a different doctor that attend to her needs.

“Their language is not always clear for me to understand, but the casework helps me to understand when to take my medicine and how much to take at a time.”

C015 said she sees the same doctor all the time but not often as she should have because she works. But with no home address, she cannot get mail to remind her about her appointments. “Therefore, communicate is not the greatest around here,” she said.

Self-Care

All 15 participants claimed that self-care practicing is difficult because of insufficient training. They have a limited amount of knowledge in regards to self-care skills. All of the 15 participants mentioned in the interview that self-care was lacking as they did not receive any class training or workshop event on how to monitor their type 2 diabetes. Nine of the 15 women reflected that there was no designed structured training for self-care in the community or at the hospital during their first time of awareness about type 2 diabetes. The views of all 15 women demonstrated a need for promoting diabetes education among healthcare providers and the unique population of homeless women.

C01 said:

Taking care of my diabetes on my own is very burdensome as I cannot afford to eat the right diet. Most time all I have to eat is bread, and the shelter can only give us what they have to eat. I do walk for exercising but getting my medication all the time is not always possible. I also worry about finding a job because living without money is not easy. It is crazy when I cannot get the meds as my diabetes only take a turn for the worse.

C02 said:

I don't know a lot about my diabetes but the little that I know, I try to do my best.

I cut the sugary things out and try to walk for exercise. Don't always make my appointment but I try to go and eat less starchy stuff.

C03 said:

I find it hard to manage self-care as I cannot check my glucose level as often as I should because I have to work. But I try to make sure I got my medicine when I ran out of it. I have the little machine to check my sugar but it is not always convenient, so I don't bother when I have work.

C04 stated that it is not difficult for her to care for herself but she has to be mindful of what she is eating even though she does not always have a choice of vegetables or fruits. However, mentioned she drinks plenty of water and less soda but stresses it is struggling to do everything when she thinks about her diabetes.

Participant C05 and C06 confirmed that a health aide could make it a little better to manage self-care as this service would help them to focus on tasks daily to care for their diabetes. They both shared that they take their medication everywhere they go as they fear it could get in the wrong hands. Participant C05:

I also take other meds that just complicate things. Yes, I take pills for my depression and anxiety. I have insurance because of my job, so I make sure to take them like I am supposed to.

C06 said she is trying her best to comply with what the doctor tells her.

I am not overeating fried chicken. I have to change my lifestyle and be careful with how I eat. I get my exercise in as I walk here and there and always on my foot at work.

C07 stated, “With no support group it’s hard to manage self-care, and at the shelter, there is no privacy, they have to hide your stuff to secure it.” She went on to say:

My hands are not always clean, and sometimes even the food makes me sick.

No activities to encourage exercise and I cannot go to no gym. I cannot store my insulin here at the shelter, so I have to go to the clinic at the hospital often to get my insulin. Some days I just cannot make it over there.

Participant C08 explained:

I don’t worry about my diabetes too much; I just try to stay alive each day. This thing is luxury, and I do not have it, so I just worry about the basic. Sometimes the caseworker helps to get medicine, but I don’t always get to catch up with her when she comes around. This diabetes is not going anywhere, they cannot cure it, and it is here to stay. I am going to leave it here when I die.

C09 stated:

I practice self-care to manage my diabetes in the best way I know how. But not a lot of support and encouragement. Just have to take care of myself to get through each day. Getting out every day to work kind of keep me in shape.

C010 said:

I am having trouble to care for myself because sometimes my blood pressure is too high and I think the docs they give me more tablets for my pressure than for

my diabetes. I don't get to eat the right food, but the shelter can only feed us what they have.

C011 stated that she does not get to participate in regular checkups at the doctors and it is a challenge to care for herself.

I don't always have medications because I have no money. Not even a planned diet I don't have, no help to educate me on how. The doctors need to tell us more about this disease. How to improvise or substitute things, don't they know we cannot afford anything.

C012 said:

Self-care is difficult in my situation with no job. I do try to follow up with doctors' orders but some time end up taking other people's meds when I don't have. Yes, the doctor gives me full instruction but most time I forget by the time I walked out of the hospital. I have to worry about what to eat, how to get a bath and so on and so forth. I sometimes have to eat hard candy to kill hunger and use lemon juice and basil leaves to control my blood sugar.

C013 stated:

I have little control over the kind of food I eat, and I drink whatever I get especially in this hot weather. Self-care sound restricted, but I could not manage it even if I really want to. Lack of exercise and at times I am fatigue and stress to take care of my diabetes correctly.

Participant C014 explained she tries to choose vegetable when she gets that chance.

My voluntary duties in the community garden give me some exercise to stay active. When you cannot prepare your own food to eat a decent meal it a crying shame, but what to do. I can only try! In any event, I am thankful though as the garden keeps me busy.

C015 confirmed that she works and that was her exercise.

I try to have fruits and vegetable almost every day. I don't always remember to take my pills on time. Sometimes I don't even get to eat on time because it gets busy at work but I try always to take a lunch break. Type 2 diabetes has changed my life, and I have to take care of myself better. I have to take note of what I am eating in order to stay healthy, at least for a little while longer. My big problem is that I don't get a reminder from my doctor to follow up regularly with my appointments. Because I need time to let the boss know in advance, so I can take time off for the appointment and get coverage for when I go. Not much support and encouragement for me to stay on top of my checkups. I have a phone, and they don't even try to call me, but they want to tell me to exercise more. I try to stay busy and believe that an active lifestyle should be good enough as long as I take my medications and eat healthily. But with the challenges of life, it will never be easy to sustain the skills of self-care sufficiently. It would be nice if even the job and the community give more support to people who have diabetes. The doctors them say almost everybody has diabetes, prediabetes, type 1 and type 2. But not a lot of supportive help is available to us here in the shelter.

Education

All 15 women said that the doctors should be taking time to teach them a little bit more about their medications. They mentioned the other medications that they are taking for pain, depression, stress, and anxiety along with the diabetes medication. The women stated that they do receive material with information about type 2 diabetes in the hospital. It was alarming that 11 of the 15 women said they start to read the material but never finish it due to loss of concentration, interest or fatigue because of hunger and frustration.

C01 said:

These doctors give too many papers, and they expected you to read them, but I learn better when someone tells me things. Look at me, live in a shelter no place to go, no money or food to eat as I want to. I know my health is important, but other things come first, like something to drink and eat so I won't pass out.

Participant C02, C03, and C04 stated they believe there should be some kind of support group to educate people. Participant C02 stated:

The support groups should help to teach the soup kitchen also about the nutrition diet for diabetes. That way people like us with diabetes can have a choice to get the right food that we need. The doctor or the nurse needs to teach us more about the symptoms and give little tips or solution to take care of the high or low blood sugar levels to get it in check because most people don't know how to check it. If we have an idea of the symptoms, then we might be able to try and monitor it in between the appointment visits.

C04 said, more people need to be talking about it so we can try to help each other. They tell you oh, you have to eat right and stay active but how many of us really know what that means,” she stated.

C05 said:

The education is good because it can help me to learn about the right type of food to eat. The community workers and caseworkers could help more by suggesting how to eat better. Teach us about the medicine that we need and make it easier for us to understand this situation.

C06 said, everyone needs to learn how to eat better because it seems like it is what “we are eating that's making us sick.”

I know the medicine I have to take, but I am not sure about the type of food I need to eat. There should be health aides going around to encourage us to make the appointments or remind us. Most of us who live here don't get the diet that these doctors want us to be on. It's not our fault we have to eat what we can get to stay alive. This is about staying alive, and we all need help to stay alive. Being without a place is not by choice, but some of us just fall off the wagon for whatever reason.

C07 said:

Back in my grandmother days, they use tea to cure everything. Now it is pills and more pills, and I know there could be a more straightforward way that takes care of diabetes but the way doctors explain it, this is too expensive for me who don't have much to live on.

Participant C08 explained:

I cannot eat how the doctors want me to eat. I lack the proper diet already, but there should be more help from the shelter, the community, caseworker and social worker to make sure we are using the information the doctors are giving us to use.

Participant C09 said:

It is necessary, so we can understand the routine and lifestyle change to survive this diabetes thing. We need to learn about the different food groups in order for us to make better choices when it comes to what we eat. Maybe the doctors don't have the time to spend with each patient when they see us, but nurses can be doing that more too.

C010 said people with diabetes need to know how to do what they have to do, to manage diabetes better.

Everybody drinks soda more than how he or she drinks water because water is a dollar and 75cents or two dollars, but a can of soda is only 75 cents. When you get a quarter, and it adds up, it's easier to get a can of soda instead of water.

People are going to get money for a soda, and that's not too good for people with diabetes. So, they really need a support group to teach us and explain things in steps to help us to do better in caring for our diabetes issues.

C011 said:

When I am fatigued or hungry, I cannot exercise, but if I can be taught how to get involved in activities to stay active, it might work. Diabetes people need to learn about their medicine and how to get cheaper medications to help us survive.

C012 stated:

I get tired all the time and exercise are never on my mind. I could see myself benefiting from a class that would help me to exercise if it is even to sit on a chair and motivates me to do what I can do. I stick myself to test my blood sugar, and that's all they teach me. Sometimes I don't clean the area before I stick myself and I am not sure if the reading is correct, but I judge it based from the last reading from the machine.

C013 stated that the doctor says people with diabetes are more likely to have a heart attack or stroke.

But they don't try to teach us more how to care for ourselves with diabetes. We need to be educated on how to keep our blood sugar low and the need to take our medicine every day. There should be social workers to teach us how to take control of our diabetes to lessen the risk to other problems like eye disease or kidney diseases.

C014 said:

I can't see these folks not teaching us more diabetes and giving us new information on how to control it. I asked them a question, and they answer me, but I don't even understand all that they are saying to me. They have counseling for mental health but not counseling for type 2 diabetes. Don't they think it is important like that too? The doctor says I have to adapt to healthy eating but no education how to do these things. I lost my glucose meter, and it is hell to get another one now. They probably think I am going to eat it or something. But we

need help to problem-solve and skills to handle our stress. We need help how to understand how the medicine works for us to manage diabetes.

C015 said, she need help to make meal planning and control weight-loss as she struggles with these aspects in her care plan.

When the sugar is high, it can damage our body because I urine a lot and sometimes have a blurry vision but no matter what medication the doctor gives me the problem still comes back. Plus, I am always feeling hungry, so I eat whatever I get to eat and I know I have to eat better but I need the help and constant encouragement to do better. If these doctors claim that diabetes can be prevented or delayed with a healthy lifestyle, then they need to be helping us to maintain this lifestyle by educating us as well.

Improvement

All 15 of the women who participated in the study admitted that they could have been treated better by their doctors to ensure they are following their diabetic routine. These 15 participants mentioned about the workshop or classes that should be accessible to them to learn more about the risk for this disease. C09 confirmed, “The doctors made me feel so scared instead of assuring me that this thing (diabetes) can be controlled.”

C01 said, “We need the tools to help us make it because this thing is not going anywhere.” I am stuck with it for life,” she reported.

C02 commented:

Yes, I think more can be done to make sure we are on top of this disease. I think the community, on the whole, should be helping to guide us through this. From doctors, caseworkers to the people who work here at the shelter.

Participant C03 shared her opinion:

It is so hard to keep my head straight sometimes, and just a reminder of what to do would be nice. The shelter could help to make sure people here with diabetes, get the right diet. I know they are doing their best to feed us, but more can be done, I think.

Participant C04 explained, she believes there could be more improvement to educate women like herself, who are not stable, always moving around. She went on to say most of them do not even attend any good school, so they do not know anything about chronic sickness.

C05 stated:

You don't know what to do with this diabetes and what it can do to you but the more we learn about it. I think we can be conscious of the fact that we need to pay attention to it and take care of our self-better. It takes a village, and we need guidance daily to manage this thing call diabetes.

C06 said, she tries her best but she believes with support, "Things could be much better." You have to change how you think, eat, drink and live." When you have diabetes, it will never be the same when you have this disease." Check you weigh, exercise and such delight, it's not easy," she confessed.

C07 said:

You think you are okay all along but until you have to go to the doctor or hospital and they tell you all these things that are happening to you. It is scary! Because they told you not to eat white bread but when that is your only source of food what you are going to do? So, you see we need help to follow doctor's orders.

C08 said:

You can take the horse to the water, but you cannot force him to drink. It's like me, I know I have to change my lifestyle to manage my diabetes, but if I cannot afford it, I just cannot do it. Yes, I try to go to my appointments and take my medication, but there is more to it like the diet. I cannot buy food; the soup kitchen should be catering for diabetic people. Americans, in general, don't eat healthy according to the health magazine I was reading from the hospital. And it's true because everything we eat is fatty.

C09 said:

People might think we don't care but if we cannot care how are we going to care? Most of us live off the bare minimum, no job, no finance, no nothing. Thank God, I have my little job, and I have insurance. But some of these ladies have nothing. I am saving up to have my apartment, and I still cannot buy the right food I should be eating. It would be helpful if the caseworkers were doing a little more to help us get through this struggle. Some don't make it to my age due to the struggle and their health just go downhill fast.

C010 said:

Maintaining the blood sugar level is difficult. Changing behavior to satisfy our health is one of the hardest things I ever have to do besides having my daughter. Getting that support from other people or friends could make a whole lot of difference. To know somebody is with you to encourage and help you to better understand your purpose of living and surviving with diabetes is a wonderful feeling.

C011 stated that diabetes is complicated and she was still trying to understand the disease. She also explained:

Some education to let everybody know the danger of this thing call diabetes. Yeah, we have diabetes, but if we are not equipped with the know-how, we cannot accept and adapt to change and accommodate this disease. When you have diabetes, you have to learn to live again and healthy.

C012 mentioned:

Type 2 diabetes is a killer, and I see my friend die from diabetes as he had kidney trouble and heart problems. His son tries to help you know, but the damage was already done. I believe that our doctors should be doing more to help us, even the caseworkers. They should promote self-management since they love their job so much. They should be doing more to improve our overall health status.

C013 said that the doctor explained diabetes could reduce the quality of life.

I agree, but more should be done to help us make a conscious decision to manage diabetes sickness. Who wants to read when they are hungry or thirsty?" Plus, some of the prints so small. Who going to take time out to read the fine prints?

Most of us ladies here are failing with this diabetes routine. We need people to help encourage us, and I speak for myself. Lord knows I could use the extra coaching. They tell you what can happen if you don't take care of your diabetes but that just makes me anxious, depress and build fear in me. What happened to the part where they help you to stay strong and of courage to fight this diabetes.

C014 said:

I know with me not having a job and have to be fighting with the system to get insurance is a stressor. We need people to help us to understand one on one. Teach us about the food we should be eating and teach the soup kitchen chef to cater to people like us with diabetes. How can we do better if we cannot have the necessary food group that the doctor recommends us to have?

C015 believes she could use more help in order for her to be successful in the management of her diabetes care.

The health care workers should be taking steps to build a better relationship with the patients, especially patients like us who are homeless and have no one to care for us but ourselves. They should be teaching us more about the medication in an understandable way. They need to motivate us to take better control of our sickness. Talk to us so as to help build our confidence to take better care of our diabetes. Communicate to us to establish trust you know, providing that supportive environment. Everyone needs to show that will you know; the docs need to spend more time with us as the patient. Communicate in a manner that we can relate and express that passion of concern for the patient to have a good

outcome. We need people to see us as humans and treat us like a human not as a homeless person or a bum. They sometimes look at me as if they are scared because I might smell or don't take a bath regularly.

Motivation

During the process of the interviews, participants were asked what motivates them to get up and about every day. The remarks were obvious that some were self-motivated because they wanted to be their best. Others looked to the spiritual power (God) for strength to survive through their daily tasks. Maslow's theory (1943) teaches that motivation increases when needs are met and decreases when needs are not met. The stage of readiness is a motivation to change lifestyle. According to Maslow (1943), people are motivated to accomplish a specific need that leads to physical survival.

C01 said, "At my age now, I just try to believe in hope to motivate myself and stay alive." She further stated that nothing is easy, but she cannot just give up.

Participant C01 spoke of her appreciation for little things that she received; she stresses her continuous belief in hope.

C02 stated she sees people younger than her in a worse off condition than she is in now.

I have to stay alive because my life is worth and I use my courage to push through every day. Don't really need a lot, a blanket to stay warm, little water and a container to get some food. Once God bless me with that, I will try to do the rest.

C03 said, "I got nothing to lose." My job keeps me going and I am happy. Life did not turn out the way I thought, but I cannot think of success, just have to think of one day at a time."

C04 confirmed that she could not worry about life because it will make her sickness worse.

I just beg the Lord for strength to get up and see another day. That is all I need and whatever comes after I am happy. This is the day that the Lord had made and we just have to be glad we are in it.

C05 said:

I have to believe in myself and do what I have to do to stay alive. This diabetes will wear me out. I mean I can only manage it until I cannot manage it anymore. Other than that, I strive to do the right thing. Stay out of trouble and take all the help I can get. People are nice, and most of them want to help, but we as women have to be careful at all times to be safe. That's all you want to stay safe, don't have to compete or act crazy, just have to stay safe.

C06 said:

I have faith in Christ; he will see me through. I have faith in him; he helps me to get a little job. God help me to get through the rest, it's difficult, but he encourages me, and he is good to me, lighten my burden. Diabetes is a stressor, but God lightens my burden.

C07 mentioned that staying motivated is a challenge, but when she thinks of myself as a person, she just wants to do what is best for herself. "It would be too sad for me to die, by the wayside like an animal."

C08 mentioned that she strives to better herself by trying to manage her diabetes. “The nurse encourages me, and I just have to try because no one is going to try for me. I lost hope many times, but I have to keep trying. As they say, die trying!”

C09 stated that she believes in God and depends on him for his goodness and mercy to help her carry her burden.

Living with diabetes is a silent killer, but we have to follow up with the clinic and make sure I have my medicine. The boss is not always pleasant, but they don't understand, and I try not to be a bother, you know. My sickness comes first, but sometimes I have to put it aside and obligate to the job. I would like to have my apartment, and I pray it will be sooner than later. Not getting any younger, but it is never too late to do the right thing. I am proud of myself so far, doing better than I was last year and I have a feeling I will be doing better next year. I need to stay on track and keep working for the betterment of myself.

C010 explained that she believes in the higher power because God has kept her through her rough times and good times.

He has done wonders for me, and I trust and love him because he loved me first. Before I knew I had diabetes; alcohol was my best friend. But thank God for seeing me through. For once, I am beginning to feel as though I am in a better place, praise God. I would be a lost sheep, without his presence. He opens my eyes and makes me see that there is more to life than just homelessness. There is hope, so much hope to live, and I have to believe.

C011 said:

It is hard to say what motivates me but I just tell myself. I have to try to do better to manage my diabetes. I have to try because, I am not ready to give up yet. Yeah, I am at the bottom of the barrel, but I am not giving up.” I could still find a husband,” she smiled.

C012 shared that she uses other people’s mistake to be her strength.

We can do this, to live if we try. Diabetes is here to stay, and I am going to do my best to manage it and keep it under control. The doctor said I could, and I fail not to believe it. I want to do my part and commit to making a change because I am ready.

C013 said:

I need to take care of myself. Having the support and encouragement, I believe I can make it. I want to do better for myself, and I need all the help I can get. I am willing to do what I have to do and take care of myself. I have to do this for me and take the advice of people who understand this thing and can guide me through it.

C014 explained that she knows that Christ Jesus helps her to manage her diabetes disease.

Honey, if it wasn’t for our Savior, I don’t think I would make it this far. I am getting some well-needed help, and I know it will get better. I won’t be overnight, but it will get better. I cannot give up now, didn’t do it before and I don’t intend to do it now.

C015 said:

I believe in hope. Where there is a will, there is a way. My job is the gateway to the betterment, and I am able to work, so I am willing to do all I have to do. I am learning the basic and continuing to take my medicine and stay positive. I know the doctor and caseworker want to see our progress healthily. The treatment has to take place to get a good result, and I am doing my part. Soon I will get my glasses, and I can move around better because some time with the blurriness in the eyes I'm scared to walk too much or walk late. A lot of us mean ourselves good but just need the right encouragement to be more involved in maintaining the glucose level. Self-reliance is an important skill to manage diabetes. The doctors alone can't do it, so we have to play our part. I try to make small changes, but we have to seek help constantly to adjust to the treatment routine. This disease is here to stay so we have to take care to live a little longer. But too much of us lacked interest and tired of the everyday struggle. Just have to seek the help and ask the question. Being homeless doesn't mean that we have to be hopeless. This is a transition for us, and if we get the right help, we can pull through. Housing is a big thing for us, but with the right help, we can survive the storm.

Barrier

All of the 15 participants stated that some of the barriers that they encounter are not having a home or personal address. The access to good health insurance and reliable transportation as well as an insufficient food source and job employment. According to Hopper (2012), homelessness is a complex phenomenon that overlaps economic, political, social and psychological dimensions. Stable housing demonstrates a sense of

control that promotes employment and even one's social circle. Stability in housing also improves the quality of life and hope for the future. A home is a structure that protects, shelters, supports feelings and cognition.

C01 shared:

The bus goes by once on the hour, and when I miss the bus, I just lost patience.

Food is another big deal, can't get to eat the right diet and that makes it hard to manage my diabetes. No one wants to hire me because I don't dress pretty.

When I don't have a place to rest it is a big problem because I am not safe.

C02 said:

There are too many obstacles and mountains to climb when it comes to my situation, have to fight with welfare to get insurance. I have trouble to get my insulin because I have to go every week of the month to the hospital clinic. I don't have no family and my one friend works, I hardly see her. Not too much of support to encourage my care.

C03 said she believes her barrier is fear of not being able to take care of myself.

Fear of not having a place to call home in my day and age. My job gives me health insurance, but with diabetes, I have to worry about getting my medication and secure it properly so that someone else won't steal it. Low wages are a barrier because I can barely afford anything especially this special diet the doctor has me on.

Participant C04:

The challenge I face is taking care of my sickness and following up on the doctor's orders with not too much of a help. I cannot afford to eat right or exercise the way I am supposed to be doing. An apartment is impossible with no money, and I don't know a lot about my diabetes. My biggest problem is to manage this diabetes every day.

Participant C05, C06, C07, C08, and C09 stated that the barriers living with diabetes is stressful. These five participants of the 15 women in this study expressed audible frustration when discussing some of their barriers encountered. Transportation was said to be a problem as they have no reliable vehicle with limited funds to afford public transportation or family members to render support. The convenience of their own personal space and other issues associated with diabetes such as blood pressure and blood glucose testing, a healthy diet and insurance coverage were just a few mentioned. Participant C08 talked about not being able to afford organic food as well as have difficulty to obtain health insurance. C07, C06, C05, C08, and C09 spoke of having limited knowledge about their diabetes. These women revealed that it would be useful to have classes for the workers in the soup kitchen to educate the cooks about healthy eating food for diabetes people. C07, C06, C05, C08, and C09 claims that lifestyle change is a challenge for them because they cannot afford to buy the food and follow up with a healthy low carb diet or exercise activities.

C09 said:

I think my barrier is not having the funds to get my medication, housing and travel to my appointments so I can make that change to survive type 2 diabetes.

Diabetes can kill me, and if I cannot manage it and take care of myself, I am afraid I will not make it. To get insurance for health care, should not be so difficult and getting the medicine shouldn't be a struggle. This only cause daily care to be impossible for people like me who don't have a home.

Six of the 15 participants in this study expressed the same feelings about the barriers they encountered when seeking health care. The views they shared demonstrates the obstacles faced to get health insurance from the county assistance office. Their chance for getting Medicaid health insurance was increased when they got into the shelter system with the assistance of a caseworker. The six participants explained that employment, job training skills and personal barriers like alcohol and smoking habits contributed to their everyday challenges. They had no knowledge of the benefits or how to obtain it. The participants stated that with no income because of lack of employment, it is difficult to get help with health insurance. The participants claimed they seek service from the hospital but sometimes never get to speak with a caseworker.

Participants gave various accounts of the obstacles they face with documentation, for example, their social security card which many of them claimed is lost or they do not know the number. The participants lack information about services for federal programs and are likely to have limited access to several sources of information. Therefore, it was clear that most of the participants are unaware of programs and how to apply if they were to be eligible for it.

C010 and C011 stated that they believe they could receive cash benefits from the social security administration district office but cannot fill out the application forms

which is over 17 pages long. The participants lamented that the information required for this form is too much and the process is complicated, and they have to wait in long lines. Participants C010 and C011 expressed that this process is way too complicated, as it has a considerable amount of paperwork. Participants C012, C013, and C014 described the same process with the county welfare system. They shared that the application process to obtain cash assistance and Medicaid was tough as it requires multiple contacts and a mailing address. They further stated that failure to provide this information and meet deadlines result in a delay of benefits. Participants C011, C012, and C013 shared similar comments about communication creating a challenge to receive medical help with no mailing address and telephone, they cannot make or keep their appointments and participate in follow up care of a physician.

C015 shared that as a homeless person who is employed it is still difficult to maintain health insurance and she experiences obstacles.

Not everywhere I can go for healthcare service, and they accept my health insurance card. As a low-income earner person, there is still limited resources to obtain stable housing. I have been on the affordable housing list for over 4 years and still cannot get a voucher for Section 8 housing.

Summary

In Chapter 4, I reviewed the setting and the demographics of all 15 participants. All of the interviewees were female in the age range of 55 to 64 years old and varied ethnically. The experience shared was based on the open-ended questions asked during the in-person semi-structured interviews with each participant. The interview questions

were categorized to explore the experiences of the interviewees in their own words. The themes were cultivated from the analyzed data that reflects the actual responses of the participants. The reflection of the 15 participants included in this study identifies important aspects of their lived experiences. The analysis of significant themes creates a definite description that voiced the interviewee's individual experiences. The category of themes was grouped based on initial patterns reported by all participants. By using a phenomenological approach, I was able to explore and obtain a clear understanding of the participant's experiences with type 2 diabetes in a homeless setting.

Chapter 5 will provide a discussion of the primary themes discovered in the interviews and interpretation of the findings in this study as well as the implications for social change. Chapter 5 will also include recommendations for action and future studies. The final chapter is an overview of the purpose of the research and limitations of this study.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this qualitative study was to explore and understand the experiences of older women with Type 2 diabetes who are homeless. All the interviews were audio recorded, transcribed verbatim, and lasted about 45 minutes. I took field notes during the interviews and after to ensure that I captured all the evidence that gives a meaning to aid in the understanding of the phenomenon. I analyzed the data after all the interviews were completed. Maslow's hierarchy of needs could be translated to address improvements among these homeless diabetic women. Bronfenbrenner's theory (1979) of the ecological system enhanced the development of the study as I aimed to explore the lived experiences of the participants. The microsystem theory helped me understand a pattern of activities in the environment in which participants live (see Bronfenbrenner, 1979). Diabetes self-management strategies are created and enhanced within their sociocultural environments. All the studied participants had shared that their diabetes was not fully managed.

Diabetes is a disabling and deadly disease that is costly and still has an increasing prevalence worldwide (Danaei et al., 2011). I determined that qualitative research was appropriate to gather the insight from the experiences interviewees shared. This method provided vital insight into the sociocultural aspects of diabetes that health workers may use to develop diabetes management programs for homeless populations. In this final chapter, I discuss the main themes discovered, interpret the findings, address limitations,

offer recommendations, and discuss the implications for social change that impact the women with type 2 diabetes.

Interpretation of the Findings

The findings in this study are based on the recorded experiences and perceptions of the 15 participants. I derived eight themes from the data collected: (a) experience, (b) manage/cope, (c) communication, (d) self-care, (e) education, (f) improvement, (g) motivation, and (h) barrier. These themes were generated from nodes constructed based on the precise verbiage from all the participants.

Experience

The findings are aligned with Moustakas's (1994) phenomenological research theory, which focuses on the essences of experiences. Moustakas saw experience and behavior as an integrated relationship. I viewed the participants as inseparably connected with the phenomena they were experiencing, and they described their experiences in in-depth interviews. The data gathered in this study detailed the descriptions of each participant's experience. Moustakas's principles aided me in being involved in participants' worlds of experience. The participants shared their experiences of living with diabetes every day as being difficult. All 15 participants explained that their experiences when visiting a health care provider or physician were not pleasant because too much information was conveyed and they did not remember everything that was told to them at the time of visit.

They complained that the written information was too much for them to read, the print was too small, and they could not read it all because they have to worry about what

to eat or drink. All the participants mentioned the lack of financial resources, even the ones who were employed, and stated it was hard to keep up with the essential supplies including their medications for diabetes and the right food for the diet they required. Most of them shared that it is a constant struggle to worry about and manage their diabetes regimen at their age. Fourteen of the 15 women mentioned that learning about their type 2 diabetes from the doctor was a surprise at first, and they were in fear of not doing the right thing as they struggled to follow the doctor's orders. It was clear that all 15 of the participants have had negative experiences with type 2 diabetes as they declared that the medicine was costly and they have trouble getting health insurance from the welfare county office when their current insurance period had expired.

The participants explained that not having a permanent address was a disadvantage because they have multiple issues completing the application form to get health insurance. The 15 women stressed the need for appropriate diabetic nutrition and regular exercise activities to develop a lifestyle change to monitor their diabetes. The women admitted they felt dismissed and undervalued by health care providers when discussing their diabetes health. All of the 15 participants experienced challenges and anxiety as they worked to secure their medications and personal belongings while worrying about food security. In addition to lack of transportation to follow up with their appointments, the women expressed limited support from families or friends. Long waits to obtain health care assistant and insufficient documents only added to their frustration of not having a stable address to complete the process of getting health care or medications to improve their quality of life.

Manage/Cope

When participants were asked how they manage to cope with the disease on a daily basis, their responses were significant as they expressed needs like food shortage and security, medication shortage and storage, not seeing the physicians in a timely manner, and lack of privacy and adequate shelter. I used Maslow's (1943) theory of needs to understand this data because deprivation leads to deficiency needs. The participants shared that the everyday basic needs become a challenge for them to address. According to Maslow, physiological needs like food, water, warmth, rest, safety, and security must be satisfied before progressing to achieve higher level needs. The study's respondents indicated that they are willing to participate in group meetings and could learn more about managing diabetes if they are participating. Maslow mentioned that people could be motivated to achieve a specific need and some needs take priority over others. The basic need to survive is the first thing that could motivate one's behavior. Fulfilling basic needs encourages a person to move on to the next level of needs (Maslow, 1943). The 15 participants demonstrated a willingness to learn and adapt to the basic skills that could assist them in managing their diabetes disease.

This study, as well as other research findings, confirmed that there are universal human needs of fulfillment, and meeting those needs is likely to enhance a person's feelings of well-being (Konner, 2002; Ryan & Deci, 2000, Ryff & Keys, 1995). The respect of other people, learning new things, and supportive social relationships are fundamental universal needs that do not require secondary pairing with basic needs to influence subjective well-being (Tay & Diener, 2011). One of the participants made it

known that food and shelter take priority over her health. Based on the narratives that all 15 interviewees shared, I found that diabetes was a constant challenge, from making appointments to see a doctor, to eating, exercising, obtaining, and storing their medication. They all showed a considerable amount of concern for taking care of their type 2 diabetes disease, but the concern for the primary resources was more of an echo.

Communication

Beck, Daughtridge, and Sloane (2002) suggested that from a U.S. standpoint, the essence of doctor-patient communication should be based on a solid understanding of the patient's condition and on mutual decision-making. However, Spear and Matusitz (2015) explained that the doctor-patient relationship was studied widely in the United States and most areas in the Western World, but not much is done on intercultural comparisons between doctor-patient communication in the United States. Communication style tends to be scripted or learned among professionals. The authors went on by commenting that such communication process establish relationship building, understanding the patient's point of view, and getting information (Spear & Matusitz, 2015). This process is an enduring commitment where the doctor takes time to know their client as well as his or her family and attentively listens to what the patient has to say (Spear & Matusitz, 2015).

Thirteen of the 15 participants reported that the communication level could have been better as the doctors did not seem to take enough time to effectively communicate with them. One participant, in particular, mentioned that she was scared to ask the doctor a question. Another stated she did not understand the doctor because the doctor's accent made words difficult to comprehend. It is clear that the patient's best interests are not

always prioritized (Spear & Matusitz, 2015). Many older adults tend to struggle with managing their health, and low health literacy can be exacerbating. Therefore, it is crucial for healthcare professionals to practice communicating slowly for the patients to understand the doctor's orders. This could allow them to communicate with patients of all levels. The ability to obtain, process, and understand necessary health information could build confidence to act and improve personal health as well as changing personal lifestyle and living conditions (Findley, 2015).

Self-Care

The participants revealed that they did not have the knowledge or sufficient skills to conduct effective self-care for their diabetes illness. All of the 15 interviewees elaborated that there was a need for training in their community to promote self-care as they find it quite burdensome to develop the necessary skills on their own. Telemedicine intervention, which is using telecommunication to deliver distant health care, could be made accessible to this unique population. The development of an appropriate intervention like telemedicine could target behavior to change and improve glycemic levels. According to Flodgren, Rachas, Farmer, Inzitari, and Shepperd (2015), telemedicine has the potential to improve patient health results and health care access, and reduce health care costs. One of the examples shared by Flodgren et al. (2015) was that nurses who deliver education to patients with diabetes can complete this task by telephone, email, or by short message service. Telemedicine could be used to monitor chronic condition to detect an early sign of deterioration and prompt treatment and advice (Flodgren et al., 2015). Seligman et al. (2018) recent study revealed that food insecurity

could explain why diabetes interventions are less effective in the lowest-income populations. The primary focus of diabetes self-management is diet, but with diabetes diets being expensive and financially out of reach for food insecure households, the proper diet is difficult to sustain (Seligman et al., 2018). People living with diabetes and experiencing food insecurity encounter other significant barriers to self-care management.

Education

The empowerment of education in health literacy is effective in social work intervention even though it is often times overlooked (Findley, 2015). Interventions developed in social service should include health literacy as it affects health outcomes. According to Paasche-Orlow and Wolf (2007) access to health care, the interaction between healthcare professionals, and self-care are crucial to health care results. Findley (2015), stated that on a macro level, social workers could advocate on local, state and federal policy for change in practice where health literacy is a concern. The micro level would aid them in offering a variety of interventions in creating age-friendly formats, omit complicated medical jargon, and ask clients to retell what was communicated (Findley, 2015). Eight of the 15 participants mentioned diabetes classes to learn more about their disease and how to maintain it. They all shared a need for education to have explicit knowledge about type 2 diabetes and develop solid skills to monitor and maintain their glucose levels. Education could aim to define the quality of diabetes care and improve the results of health as well as promoting awareness because it emphasizes the importance of diabetes. Individuals with diabetes experiencing homelessness continue to

face challenges as they try to manage their diabetes. The coordination of integrated care between health care providers, social service workers and aides could show significant improvement in the quality of life with this unique population. A knowledgeable social service worker could be stationed at the shelter to provide basic education to the staff about type 2 diabetes mellitus. The role of the social worker would be to assist in addressing the rigors of diabetes treatment and accommodate the realities of the homeless women. Social service workers could specialize in services that caters to homeless women and ensure they are successfully managing their diabetes disease.

The diabetes nurse could also educate to social service workers and aides at the shelter with up dated information on diabetes mellitus so that the staff would be capable to answer questions and give appropriate guidance to the homeless women. The staffs in the shelter could also help to develop a care plan that promotes self-management care and secure the medications for the women with diabetes. Soup kitchen workers could also use some direction to serve healthy meals to the homeless women with diabetes. The nurses and case workers who work in the community could provide information and suitable documentation to share with the homeless women, even the food pantry workers about healthy foods as well as snacks to encourage them to make right choice with their meals.

Improvement

The importance of self-management skills could help the homeless women to control their glycemic levels and make lifestyle changes. The idea of one participant is saying that “it takes a village.” Another stated having people to help one-on-one. The

establishment of interventions tailored in age-friendly formatting could be beneficial to participants and anyone who has type 2 diabetes. Games, visual aids like pictures and maps could be useful to help people with their diabetes. Other approaches like care plans to meet short-term goals could be used to change behaviors gradually. As heard from the remarks of the participants, not everyone likes to read. With this current knowledge at hand, it is vital to stimulate the learning abilities of this populations to convey a clear and detailed understanding with the leverage of words that are simple and easy to follow. The quality of life, care and services need to be improved as the need for understanding what it really means must be re-enforced through education. Health care providers, social workers, community outreach workers, and health aide workers must be fully engaged in these efforts of learning designed to develop social services.

The delivery of social service affects the consumer in many different ways. Therefore, advocates like organizations, health care workers and caregivers should reconsider the needs of consumers especially the underserved population and the crisis of quality care. A model of interventions can be associated with compliance of ethics to ensure professionals are practicing the highest standard quality of service when it comes to caring. This would ensure the homeless women with diabetes obtain the benefit to fully understand the transparency of care and improve efforts to engage in continuum self-care skills. The emphasis on the professional standard in the delivery of care must be influenced through an accredited educational process that would develop satisfaction to consumers receiving social services.

Motivation

When participants were asked to describe their motivation 9 of them declared the higher power, God; others in their own words suggested hope, courage, inner self, and job. Motivation is derived from a Latin word *movere* which affects an individual's behavior as well as their perception (Shafi Khemka & Choudhury, 2016). To be motivated is to have that drive to engage in an action. That drive is the physiological need to initiate behavior. Shafi, Khemka, and Choudhury (2016) explained that there is a different type of drive like being hungry or thirsty. The deprivation of food causes food to be a reward. The need for food can drive the individual to undertake a behavior that could result in the fulfillment of meeting their need. These unique participants had shown me an understanding that motivation can be learned as it produces behavior that responds to a purpose. I agreed with participant C012 that diabetes is here to stay and each of us has to play our part to manage and keep it under control. Therefore, intervention programs can be tailored to accommodate the needs of all people whether home or homeless. All the participants shared a desire to participate in some activity that will influence their behavior to fulfill daily basis needs. The development of new intervention programs can assist in motivation. Like Maslow's Theory (1943) suggested lower needs take priority and must be met before others. This demonstrated that basic needs have to be accomplished first before other needs can be fulfilled.

Barrier

Although the participants have temporary shelter, there were several barriers that were identified by them during the face to face interviews. While there is more than one

reason a person becomes homeless, they experience some of the lowest levels of health than the general population. The participants identified barriers which are some of the things that the general population takes for granted like stable housing, food security, transportation, accessing health care, health insurance, employment, social care, and services. Various health problems are prevalent among persons who are homeless in comparison to persons who are not homeless. Individuals who are homeless often experience multiple diagnoses, making it more difficult to access the relevant services that they need to take care of their health. They do not have quick access to services, making it extremely difficult to maintain their appointments to obtain medical care. The lack of long-term care leads to ongoing medical problems. The shortage of affordable housing promotes poverty and hardship for many people.

Caseworkers struggle with a heavy workload monthly to assist persons in need, but with no current address, the caseworkers cannot communicate with their clients. Without an address, it is difficult for people experiencing homelessness as they face more barriers in seeking employment because they are competing with other individuals who have a permanent address and a stable work history. The unit sample in this study are a vulnerable population who experience personal and economic barriers.

Limitations of the Study

The following below were limitations of this study:

- The results are not generalizable.
- The findings in this study are limited to a sample size of 15 participants.

- The design of the study is a qualitative one, and there are no statistical results from the outcome.
- This study depends on the participants' perceptions of their experience with type 2 diabetes while homeless in one specific location at one point in time.
- I have no knowledge how the diabetes information is transpired between health care providers and the participants in this study.

Recommendations

The experiences shared demonstrated that the individuals were willing and capable of learning how to manage their self-care by monitoring diabetes. Coping with everyday challenges can be difficult. Intervention programs could be modified to meet the direct needs of these women using the service. The material about diabetes should be more significant in prints and clear to be easily understood by anyone. Mapping diagrams with information in step by step formatting can be used to outline skills in controlling glycemia. Games can be implemented to give these women guidance about selecting diets. Healthcare professionals, social workers, community outreach workers, health aid workers, administrators in public affairs and caregivers even policymakers should be re-educated through the ecological framework. The recommended curriculum should aim to develop more efficient organizations that build stronger communities by learning about homeless people and their environment.

This curriculum would allow the women to understand the interconnectedness to access factors which is relevant to social problem-solving. Individuals who are homeless moves from place to place and experience a series of life transitions. These transitions

need environmental support and the coping skills to survive the stages of changes. When professionals can study different systems, it develops a better understanding of all the events that could have transpired in an individual's life. A future longitudinal study that tracks the progress of the participants as they enrolled in a modified intervention program is recommended.

In order to modify interventions to meet the needs of this unique population, professionals must be able to demonstrate the appropriate practices so that they can effectively communicate and satisfy this particular population with a high-quality standard of services. When communicating with the homeless women with type 2 diabetes, one should not assume that these women understand but to check by having them retell or reflect back on what was communicated. The findings of this study contribute to the knowledge base of the participant's perceptions of diabetes self-care management. The intrapersonal factors introduce a more straightforward manner to improve diabetes health. The new knowledge revealed that the implementation of a secure storage area for diabetic medications is needed in the shelter. The administration of insulin injections is vital and needles should be allowed but, stored appropriately in a locked cupboard or cabinet at the shelter to support the self-management skills of the older women with diabetes.

Therefore, the provision of disposal containers for sharps is important and should be considered by the shelter managers to be installed in the facility. I also recommended that the shelter staffs could be properly trained and work with soup kitchen workers to ensure the correct nutrition for these women with diabetes. This allows the staffs to

know how to provide appropriate snacks before bedtime for the women with type 2 diabetes and teach them to make better food choice. Clinicians in the community could assist in educating staffs in these shelters to help in an emergency, just in case any of the women exhibit signs of hypoglycemia. The staff would know how to administer oral glucose and if the individual with diabetes become unresponsive, they know how to call 911 for immediate help.

The clinicians should also encourage the women with diabetes to utilize telemedicine, where they can call the diabetes nurse and ask questions or obtain professional reliable advice and get quick information about their prescription for medications. The shelter director should give these older women with type 2 diabetes access to the location mailing address to allow the women to have a temporary address. By establishing a program for emergency mailing it could help the homeless women to apply for county public assistant benefits like food stamp or supplemental nutrition assistant program (SNAP), social security income and, health insurance. Because applying for these vital services through the county requires a permanent address.

Implications for Social Change

Based on the knowledge gathered from these participants and the findings in this study, it was clear that more can be done. By exploring the experience of the older homeless women, it was discovered that workers at the shelter and soup kitchen could be trained to provide support to this particular population. Planning mandatory staff training quarterly during the year to better serve the older women with diabetes is essential. A practical approach is engaging this population to be involved in intervention programs

that are gently age-friendly to interact with them personally. To gain their attention and understanding their needs to establish positive social change. This study has the potential for social change as the findings are based on the direct responses from the participants. The services cannot be rendered because the lack of an address creates a lack of communication. The shelter director could develop a program that provides mailing address to reduce some of the barriers that the women experienced. This study revealed that modified or tailored intervention could empower the older homeless women to develop self-care skills and manage their type 2 diabetes. The participants in this study could influence social change in the community as they contributed to a body of knowledge on diabetes's barriers, challenges and the need for education to motivate self-care skills among them. The implementation of modified intervention programs could meet the needs of these older homeless women with diabetes and lead to social change that will improve long-term care for these women.

Conclusion

This study was conducted to explore the experiences of older women who are homeless with type 2 diabetes. The findings revealed the perception of the participants experiences, their needs for self-care management, the daily challenges, and barriers as well as the misconceptions surrounding homelessness. There were 8 themes that naturally emerged from the data collected through interviews: (a) experience, (b) manage/cope, (c) communication, (d) self-care, (e) education, (f) improvement, (g) motivation, and (h) barriers.

The results of this study were supported by the theoretical framework in chapter 2 literature review. The existing research demonstrated the concepts explored in the significant process of this study. The outcome of the findings establishes substantial evidence that there is a need to develop awareness for type 2 diabetes. There is a real need to re-educate professionals who are working in the social and public service fields. The approach to self-care management and diabetes-related intervention programs needs to be revamped. New and improved formatting should be developed, presented and become more accessible to everyone who has diabetes whether vulnerable or nonvulnerable population. The prevalence of diabetes should be everyone's business, meaning if one does not have it, they should at least have accurate information about it to convey such information to their friends or neighbors who might have diabetes and experiencing symptoms.

Maslow (1943) explained the deficiency of needs deriving from deprivation. Based on the knowledge gathered from the participants, they have needs and want these needs to be satisfied. Apparently, with the appropriate guidance of tailored interventions to meet their needs, they can be motivated and adapt to new life skills that would assist them to learn how and prepared themselves to manage the challenges by acting lifesaving skills. Learning how to participate in support groups and diabetes classes would inform them and encourage involvement in the social network.

The prevalence of type 2 diabetes is widely progressing worldwide. Homeless individuals like these women who have diabetes experience many challenges and the access to health care information as well as social services is a vital component of their

well-being. The findings from this study can improve awareness of the barriers and challenges that older homeless females with type 2 diabetes encounter every day. The results of this study can also be used to enhance local and state programs in the development of effective diabetes education regarding self-care management for the vulnerable population.

References

- Alpert, P. T. (2016). Screening for diabetes mellitus type 2: Shifting the focus on diagnosis. *Home Health Care Management and Practice, 28*(1), 70-72. doi: 10.1177/1084822314559941
- American Diabetes Association (2016). Standards of medical care in diabetes. *The Journal of Clinical and Applied Research and Education, 39*(1), 12:55. Retrieved from [www.diabetes.org/diabetes care](http://www.diabetes.org/diabetes-care)
- American Diabetes Association (2014). Standard of medical care in diabetes. Retrieved from www.diabetes.org/
- Andrews, A., I., Gomez, D., Larey, A., Pacil, H., Burchette, D., J., Hernandez Rodriguez, J., & Bridges, A., J. (2016). Comparison of integrated behavioral health treatment for internalizing psychiatric disorders in patient with and without Type 2 diabetes. *Families, Systems & Health, 34*(4), 367-377. doi:10.1037/fh0000224
- Baek, R. N., Tanenbaum, M. L., & Gonzalez, J. S. (2014). Diabetes burden and diabetes distress: The buffering effect of social support. *Annals of Behavioral Medicine: A Publication of the Society of Behavioral Medicine, 48*(2), 145–155. doi:10.1007/s12160-013-9585-4
- Baxter, S., Johnson, M., Payne, N., Buckley-Woods, H., Blank, L., Hock, E. . . . Goyder, E. (2016). Promoting and maintaining physical activity in the transition to retirement: A systematic review of interventions for adults around retirement age. *The International Journal of Behavioral Nutrition and Physical Activity, 13*:12. doi:10.1186/s12966-016-0336-3

- Bean, K. F., Shafer, M. S., & Glennon, M. (2013). The impact of housing first and peer support on people who are medically vulnerable and homeless. *Psychiatric Rehabilitation Journal, 36*(1), 48-50. doi:10.1037/h0094748
- Beck, R. S., Daughtridge, R., & Sloane, P. D. (2002). Physician-patient communication in the primary care office: A systematic review. *Journal of the American Board of Family Medicine, 15*, 25–38.
- Beckles, G. L., & Chou, C. (2016). Disparities in the prevalence of diagnosed diabetes - the United States, 1999-2002, and 2011-2014. *MMWR. Morbidity and Mortality Weekly Report, 65*(45), 1265-1269. doi:10.15585/mmwr.mm6545a4
- Berkman, N. D., Davis, T. C., & McCormack, L. (2010). Health literacy: What is it? *Journal of Health Communication, 15* (Suppl. 2), 9-19.
- Biederman, D. J., & Lindsey, E. W. (2014). Promising research and methodological approach for health behavior research with homeless persons. *Journal of Social Distress and the Homeless, 23*(2), 105-108. doi:10.1179/1573658X14Y.000000008
- Blair, M. (2016). Diabetes mellitus review. *Urologic Nursing, 36*(1), 27-36. doi:10.7257/1053-816X.2016.36.1.27
- Bowen, E. A., Miller, B., Barman-Adhikari, A., Fallin, K., & Zuchlewski, D. (2016). Emerging adult homelessness in geographic perspective: A view from the Rust Belt. *Children and Youth Review, 73*, 213-219. doi:10.1016/j.childyouth.2016.12.013

- Brenner, B. S. (2013). *Qualitative research methods for media studies*. New York, NY: Taylor & Francis.
- Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge, MA: Harvard University Press.
- Brown, C., & Mueller, C. T. (2014). Predictors of employment among sheltered homeless women. *Community, Work, and Family, 17*(2), 200-218. doi: 10.1080/13668803.2014.890562
- Brown, R. T., Goodman, L., Guzman, D., Tieu, L., Ponath, C., & Kushel, M. B. (2016). Pathways to Homelessness among Older Homeless Adults: Results from the HOPE HOME study. *PloS one, 11*(5), e0155065.
- Burns, R. J., Deschênes, S. S., & Schmitz, N. (2016). Associations between coping strategies and mental health in individuals with type 2 diabetes: Prospective analyses. *Health Psychology, 35*(1), 78-86. doi:10.1037/hea0000250
- Busch-Geertsema, V., Culhane, D., & Fitzpatrick, S. (2016). Developing a global framework for conceptualizing and measuring homelessness. *Habitat International, 55*, 124-132.
- Casagrande, S. S., Fradkin, J. E., Saydah, S. H., Rust, K. F., & Cowie, C. C. (2013). The prevalence of meeting A1C, blood pressure, and LDL goals among people with diabetes, 1988–2010. *Diabetes Care, 36*(8), 2271-2279.
- Castellow, J., Kloos, B., & Townley, G. (2015). Previous homeless as a risk factor for recovery from serious mental illnesses. *Community Mental Health Journal, 51* (6), 674-684. doi:10.1007/s10597-014-9805-9

Center for Disease Control and Prevention (2016a). Diabetes: Type 2. Retrieved from www.cdc.gov/genomics/public/features/diabetes.htm.

Center for Disease Control and Prevention (2016b). National Homeless Person's Memorial Day. Retrieved from www.cdc.gov/features/homelessness/index.html

Center for Disease and Prevention (2017). National Diabetes Statistics Report. Retrieved from www.cdc.gov/diabetes/data/statistics/statistics-report.html

Chambers, C., Chiu, S., Scott, A., N., Tolomiczenko, G., Redelmeier, D. A., Levinson, W., & Hwang, S. W. (2014). Factors associated with poor mental health status among homeless women with and without dependent children. *Community Mental Health Journal, 50*(5), 553-559. doi:10.1007/s10597-0139605-7

Chomko, M., Odegard, P., & Evert, A. (2016). Enhancing access to diabetes self-management education in primary care, *The Diabetes Educator, 42*(5), pp. 635-645 doi: 10. 1177/0145721716659147

Chun, K.M., Kwan, C.M., Strycker, L., A, & Chesla, C., A. (2016). Acculturation and bicultural efficacy effects on management. *Journals of Behavior Medicine, 39* (5), 896-907. doi: 10.1007/s10865-016-9766-2

Corporate Supportive Housing (2016). Healthy aging toolkit. Retrieved from <http://www.csh.org/wp-content/uploads/2016/09/Healthy-Aging-Toolkit.pdf>

Danaei, G., Finucane, M. M., Lu., Y., Singh, G. M., Cowan, M. J., Paciorek. C. J., ... Bjerregaard, P. (2011). National, regional, and global trends in fasting plasma glucose and diabetes prevalence since 1980: Systematic analysis of health

examination surveys and epidemiological studies with 370 country-years and 2.7 million participants. *Lancet*, 378(9785), 31-40.

Daskalopoulou, S. S., Rabi, D. M., Zarnke, K. B., Dasgupta, K., Nerenberg, K., Cloutier, L., ... & McKay, D. W. (2015). The 2015 Canadian Hypertension Education Program recommendations for blood pressure measurement, diagnosis, assessment of risk, prevention, and treatment of hypertension. *Canadian Journal of Cardiology*, 31(5), 549-568.

De Groot, M., Golden, S., H., & Wagner, J. (2016). Psychological conditions in adults with diabetes. *American Psychologist*, 71 (7), 552-562. doi:10.1037/a0040408

Denzin, N.K. (1978). *The research act: A theoretical introduction to sociological methods*. New York: Praeger. Google Scholar

Dey, I. (2003). *Qualitative data analysis: A user-friendly guide for social scientists*. Routledge.

Ding, Y., Sun, X., & Shan, P. (2017). MicroRNAs and cardiovascular disease in diabetes mellitus. *Biomed Research International*, 1-8. Doi:10.1155/2017/4080364

Emdin, C. A., Rahimi, K., Neal, B., Callender, T., Perkovic, V., & Patel, A. (2015). Blood pressure lowering in type 2 diabetes: a systematic review and meta-analysis. *Jama*, 313(6), 603-615.

Espeland, M. A., Probstfield, J., Hire, D., Redmon, J. B., Evans, G. W., Coday, M., ... & Dulin, M. F. (2015). Systolic blood pressure control among individuals with type 2 diabetes: a comparative effectiveness analysis of three interventions. *American journal of hypertension*, hpu292. Retrieved from <http://scholar.google.com>

- Findley, A. (2015). Low health literacy and older adults: Meanings, problems, and recommendations for social work. *Social Work in Health Care, 54*(1) 65-81. doi:10.1080/00981389.2014.966882
- Flodgren, G., Rachas, A., Farmer, A., J., Inzitari, M., & Shepperd, S. (2015). Interactive telemedicine: Effects on professional practice and health care outcomes. *Cochrane Database of Systematic Reviews* (9). doi:10.1002/14651858.cd002098
- Fugard, A. B., & Potts, H. W. (2015). Supporting thinking on sample size for thematic analyses: A quantitative tool, *International Journal of Social Research Methodology: Theory & Practice, 18*(6), 669-684. doi:10. 1080/13645579.2015. 1002453
- Garcia, M. E., Lee, A., Neuhaus, J., Gonzalez, H., To, T. M., & Haan, M. N. (2016). Diabetes mellitus as a risk factor for development of depressive symptoms in a population-based cohort of older Mexican Americans. *Journal of The American Geriatrics Society, 64*(3), 619-624. doi:10.1111/jgs.14019
- Gieryn, T. F. (1999). *Cultural boundaries of science: Credibility on the line*. University of Chicago Press. Retrieved from <http://scholar.google.com>
- Giorgi, A. (2009). *The descriptive phenomenological method in psychology: A Modified Husserlian approach*. Duquesne University Press.
- Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The Qualitative Report, 8*(4), 597-606.

- Gonzales, J. S., Tanenbaum, M. L., & Commissariat, P. V. (2016). Psychosocial factors in medication adherence and diabetes self-management: Implications for research and Practice. *American Psychologist, 71*(7), 539-551. doi:10.1037/a0040388.
- Gonzalez, J. S., Shreck, E., Psaros, C., & Safren, S. A. (2015). Distress and type 2 diabetes treatment adherence: A mediating role for perceived control. *Health Psychology, 34*(5), 505-513. doi:10.1037/
- Grenier, A., Barken, R. & McGarth, C. (2016). Homelessness and aging: The contradictory ordering of house and home. *Journal of Aging Studies, (39)*, 73-80. Retrieved from <http://acels.cdn.com.ezp.waldenulibrary.org/s0890406516301888/>
- Guba, E. G., & Lincoln, Y. S. (1989). *Fourth generation evaluation*. Newbury Park, CA: Sage.
- Guest, G., Namey, E.E., & Mitchell, M. L. (2013). *Collecting qualitative data: A field manual for applied research*. Thousand Oaks CA: Sage.
- Hancock, D. R., & Algozzine, B. (2015). *Doing case study research: A practical guide for beginning researchers*. Teachers College Press.
- Hara, Y., Hisatomi, M., Ito, H., Nakao, M., Tsuboi, K., & Ishihara, Y. (2014). Effects of gender, age, family support, and treatment on perceived stress and coping of patients with type 2 diabetes mellitus. *BioPsychoSocial Medicine, 8*(1), 16.
- Hategan, A., Tisi, D., Abdurrahman, M., & Bourgeois, J. A. (2016). Geriatric homelessness: association with emergency department utilization. *Canadian Geriatrics Journal, 19*(4), 189.

- Hopper, K. (2012). Commentary: The counter-reformation that failed? A commentary on the mixed legacy of supported housing. *Psychiatric Services, 63*, 461–463.
doi:10.1176/appi.ps.201100379
- Houle, J., Lauzier-Jobin, F., Beaulieu, M. D., Meunier, S., Coulombe, S., Côté, J., ... & Lambert, J. (2016). Socioeconomic status and glycemic control in adult patients with type 2 diabetes: a mediation analysis. *BMJ Open Diabetes Research and Care, 4*(1), e000184.
- Housing Alliance of Pennsylvania (2016). Homelessness. Retrieved from <http://housingalliancepa.org/issues/homelessness>
- Husserl, E. (1970). *Logical investigations* (Vols 1 & 2) (J. N. Findlay, Trans). New York: Humanities Press. (Original two volumes published 1900 and 1901 respectively; 2nd rev. ed. 1913)
- Johnson, S., B., & Marrero, D. (2016). Innovations in healthcare delivery and policy: Implications for the role of the psychologist in preventing and treating diabetes. *American Psychologist, 71*(7), 628-637. doi:10.1037/a0040439
- Kamps, D. M., & Tankersley, M. (1996). Prevention of behavioral and conduct disorders: Trends and research issues. *Behavioral Disorders, 22*, 41-48.
- Kautzky-Willer, A., Harreiter, J., & Pacini, G. (2016). Sex and Gender Differences in Risk, Pathophysiology and Complications of Type 2 Diabetes Mellitus. *Endocrine Reviews, 37*(3), 278–316. doi:10.1210/er.2015-1137
- Kelly, A., Calamia, M., Koval, A., Terrera, G. M., Piccinin, A. M., Clouston, S., & ... Hofer, S. M. (2016). Independent and interactive impacts of hypertension and

diabetes mellitus on verbal memory: A coordinated analysis of longitudinal data from England, Sweden, and the United States. *Psychology and Aging*, 31(3), 262-273. doi:10.1037/pag0000078

Khan, C. M., Stephens, M. P., Franks, M. M., Rook, K. S., & Salem, J. K. (2013).

Influences of spousal support and control on diabetes management through physical activity. *Health Psychology*, 32(7), 739-747. doi:10.1037/a0028609

Kirk, J., & Miller, M. L. (1986). *Reliability and validity in qualitative research*.

Thousand Oaks, CA: Sage.

Konner, M. (2002). *The tangled wing: Biological constraints on the human spirit*. New

York, NY: Henry Holt.

LaManna, E., Crowley, J. S., & Claypool, H. (2015). Medicare and individuals younger than age 65. *Generations*, 39(2), 51-57.

Lazarus, R., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York, NY:

Springer.

Leech, N. L., & Onwuegbuzie, A. J. (2007). An array of qualitative data analysis tools:

A call for data analysis triangulation. *School Psychology Quarterly*, 22(4), 557.

Li, J., Drury, V., & Taylor, B. (2014). A systematic review of the experience of older

women living and coping with type 2 diabetes. *International Journal of Nursing Practice*, 20(2), 126-134. doi:10.1111/ijn.12135

Lucherini, M. (2016). Performing diabetes: Felt surveillance and discreet self-

management. *Surveillance and Society*, 14(2), 259-276.

- Mago, V. K., Morden, H. K., Fritz, C., Wu, T., Namazi, S., Geranmayeh, P., & Dabbaghian, V. (2013). Analyzing the impact of social factors on homelessness: A fuzzy cognitive map approach. *BMC Medical Informatics and Decision Making, 13*(1), 94.
- Marín-Peñalver, J. J., Martín-Timón, I., Sevillano-Collantes, C., & del Cañizo-Gómez, F. J. (2016). Update on the treatment of type 2 diabetes mellitus. *World Journal of Diabetes, 7*(17), 354–395. doi:10.4239/wjd.v7.i17.354
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review, 50*(4), 370-396.
- McCorkle, R., Ercolano, E., Lazenby, M., Schulman-Green, D., Schilling, L. S., Lorig, K., & Wagner, E. H. (2011). Self-management: Enabling and empowering patients living with chronic cancer illness. *CA: A Cancer Journal for Clinicians, 61*, 50-62.
- McQuiston, H. L., Gorroochurn, P., Hsu, E., & Caton, C. M. (2014). Risk factor associated with recurrent homelessness after a first homeless episode. *Community Mental Health Journal, 50*(5), 505-53. doi:10.1007/s10597-013-9608-4
- Milburn, N. G., Ayala, G., Rice, E., Batterham, P., Jane Rotheram-Borus, M., & Rotheram-Borus, M. J. (2006). Discrimination and exiting homelessness among homeless adolescents. *Cultural Diversity and Ethnic Minority Psychology, 12*(4), 658–672. doi:10.1037/1099-9809.12.4.658
- Miller, T. A., & DiMatteo, M. R. (2013). Importance of family/social support and impact on adherence to diabetic therapy. *Diabetes Metab Syndr Obes, 6*(6), 421-6.

- Mladenovic, A. B., Wozniak, L., Plotnikoff, R. C., Johnson, J. A., & Johnson, S. T. (2014). Social support, self-efficacy and motivation: a qualitative study of the journey through HEALD (Healthy Eating and Active Living for Diabetes). *Practical Diabetes*, *31*(9), 370-374.
- Morey-Vargas, O., & Smith S. (2015). Be smart: Strategies for foot care and prevention of foot complications in Patients with diabetes. *Prosthetic and Orthotics International*, *39*(1), 48-60. doi:10.1177/0309364614535622 Retrieved from <http://journals.sagepub.com.ezp.waldenulibrary.org>
- Morse, J. M., Barrett, M., Mayan, M., Olson, K., & Spiers, J. (2002). Verification strategies for establishing reliability and validity in qualitative research. *International Journal of Qualitative Methods*, *1*(2), 13-22. Retrieved from <https://scholar.google.com>
- Moustakas, C. E. (1994), *Phenomenological research methods*. Thousand Oaks, CA: Sage.
- Mueser, K.T., & Cook, J. A. (2013). Introduction to the special issue on illness self-management. *Psychiatric Rehabilitation Journal*, *36* (4), 229-230. doi:10.1037/prj0000036
- Narayan, K.V., & Weber, M. B. (2015). Screening for hyperglycemia: The gateway to diabetes prevention and management for all Americans. *Annals of Internal Medicine*, *162*, 795-796. doi:10.7326/M15-0798

- National Health Care for the Homeless (2016). What is the official definition of homelessness? Retrieved from www.nhchc.org/faq/official-definition-homelessness/
- Oudshoorn, A., Ward-Griffin, C., Berman, H., Forchuk, C., & Poland, B. (2016). Relationships in healthcare and homelessness: Exploring solidarity. *Journal of Social Distress and the Homeless*, 25(2), 95–102.
doi:10.1080/10530789.2016.1254862
- Paasche-Orlow, M. K., & Wolf, M. S. (2007). The causal pathway linking health literacy to health outcomes. *American Journal of Health Behaviour*, 31, 19–26.
- Parker, R., D., & Dykema, S. (2013). The reality of homeless mobility and implications for improving care. *Journal of Community Health*, 38 (4), 685-9.
doi:10.1007/s10900-013-9664-2
- Piat, M., Polvere, L., Krist, M., Voronka, J., Zabkiewicz, D., Plante, M., Isaak, C., Noin, D., Nelson, G., & Goering, P. (2014). Pathways into homelessness: Understanding how both individual and structural factors contribute to and sustain homelessness in Canada. *Urban Studies*, 52(13), 2366-2383.
doi:10.1177/0042098014548138
- Ranasinghe, P., Pigera, A. D., Ishara, M. H., Jayasekara, L. T., Jayawardena, R., & Katulanda, P. (2015). Knowledge and perceptions about diet and physical activity among Sri Lankan adults with diabetes mellitus: A qualitative study. *BMC Public Health*, 151160. doi:10.1186/s12889-015-2518-3

- Reid, K., Flowers, P., & Larkin, M. (2005). Exploring lived experience: An introduction to interpretative phenomenological analysis. *The Psychologist, 18*(1), 20-23.
- Reisi, M., Mostafavi, F., Javadzade, H., Mahaki, B., Tavassoli, E., & Sharifirad, G. (2016). Impact of health literacy, self-efficacy, and outcome expectations on adherence to self-care behaviors in Iranians with Type 2 Diabetes. *Oman Medical Journal, 31*(1), 52-59. doi:10.5001/omj.2016.10
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*, 68 –78. doi:10.1037/0003-066X.55.1.68
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology, 69*, 719 –727. doi:10.1037/0022-3514.69.4.719
- Salem, B. E., & Ma-Pham, J. (2015). Understanding health needs and perspectives of middle-aged and older women experiencing homelessness. *Public Health Nursing, 32*(6), 634-644. doi:10.1111/phn.12195
- Seligman, H. K., Smith, M., Rosenmoss, S., Berger Marshall, M., & Waxman, E. (2018). Comprehensive diabetes self-management support from food banks: A randomized controlled trial. *American Journal of Public Health, 108*(9), 1227–1234. doi:10.2105/AJPH.2018.304528
- Shafi, A. A., Khemka, M., & Roy Choudhury, S. (2016). A new approach to motivation: Four-drive model. *Journal of Human Behavior in the Social Environment, 26*(2), 217–226. doi:10.1080/10911359.2015.1083505

- Shamsalinia, A., Pourghaznein, T., & Parsa, M. (2016). The relationship between hope and religious coping among patients with Type 2 Diabetes. *Global journal of health science*, 8(1), 208.
- Sherr, D., & Lipman, R. (2015). The diabetes educator and the diabetes self-management education engagement. *The Diabetes Educator*, 41(5), pp. 616-624 doi:10.1177/0145721715599268
- Shields, C., Baxter, D., & Mani, R. (2016). Psychosocial correlates of physical activity levels in individuals at risk of developing diabetes mellitus: A feasibility study. *New Zealand Journal of Physiotherapy*, 44(3), 157-165.
- Silverman, D. (Ed.). (2016). *Qualitative research*. Thousand Oaks, CA: Sage.
- Silverman, J., Krieger, J., Kiefer, M., Hebert, P., Robinson, J., & Nelson, K. (2015). The relationship between food insecurity and depression, diabetes distress and medication adherence among low-income patients with poorly-controlled diabetes. *Journal of General Internal Medicine*, 30(10), 1476-1480. doi:10.1007/s11606-015-3351-1
- Singleton Jr., R. A., & Straits, B. C. (2005). *Approaches to social research* (4th edition). New York, NY: Oxford University Press.
- Spear, J., & Matusitz, J. (2015). Doctor-patient communication styles: A comparison between the United States and three Asian countries. *Journal of Human Behavior in the Social Environment*, 25(8), 871–884. doi:10.1080/10911359.2015.1035148
- Stake, R. E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage.

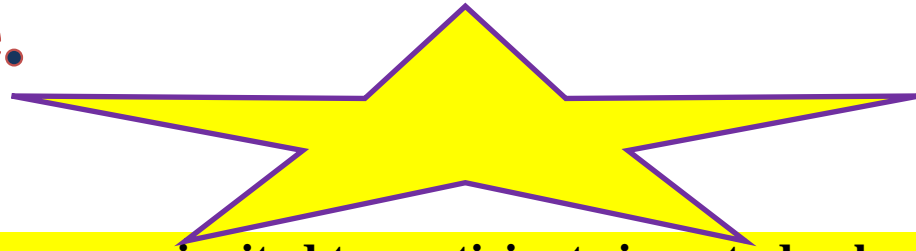
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research*, (Vol. 15). Newbury Park, CA: Sage.
- Support. (n.d.) In Oxford English dictionary online. (2017) Oxford University Press.
Retrieved from
<http://www.oed.com.ezp.waldenulibrary.org/view/Entry/194673?rskey=du3ZOe&result=1&isAdvanced=false>
- Tay, L., & Diener, E. (2011). Needs and subjective well-being around the world. *Journal of Personality and Social Psychology*, 101(2), 354-365.
doi:10.1037/a0023779
- Taylor, E. M., Kendzor, D. E., Reitzel, L. R., & Businelle, M. S. (2016). Health risk factors and desire to change among homeless adults. *American Journal of Health Behavior*, 40(4), 455-460. doi:10.5993/AJHB,40.4.7
- Tsai, J., & Rosenheck, R. A. (2015). Risk factors for homelessness among US veterans. *Epidemiologic Review*, 37 (1), 177-195. doi:10.1093/epirev/mxu004
- U.S. Department of Housing and Urban Development (2017). The 2017 annual homeless assessment report (AHAR) to congress (n.d.). Estimates of homelessness in the United States. Retrieved from
<https://www.hudexchange.info/resources/documents/2017-AHAR-Part1>
- VanderStoep, S. W., & Johnson, D. D. (2009). *Research methods for everyday life: Blending qualitative and quantitative approaches*. San Francisco, CA, Jossey-Bass. Retrieved from
<http://web.a.ebscohost.com.ezp.waldenulibrary.org/ehost/ebookviewer/ebook/bm>

xlYmtfXzI2NjEzNV9fQU41?sid=41fb75b4-0ec0-4b50-913d-8f9896947690@sessionmgr4007&vid=7&format=EB&rid=4

- Van Leeuwen, B. (2017). To the edge of the Urban Landscape: Homelessness and the politics of care. *Political Theory*, 1-25. SAGE doi:10.1177/0090591716682290
Retrieved from journals, sagepub.com.ezpz.waldenilibrary.org
- Vo, K., Forder, P. M., Tavener, M., Rodgers, B., Banks, E., Bauman, A., & Byles, J. E. (2015). Retirement, age, gender and mental health: Findings from the 45 and Up Study. *Aging & Mental Health*, 19(7), 647-657.
doi:10.1080/13607863.2014.962002
- Waldbrook, N. (2013). Formerly homeless, older women 's experiences with health, housing, and aging. *Journal of Women and Aging*, 25(4), 337-357.
doi:10.1080/0895841.2013.86213
- Weinger, K., Beverly, E., & Smaldone, A. (2014). Diabetes self-care and the older adult. *Western Journal of Nursing Research* 36(9), 1272-1298.
doi:10.1177/0193945914521696 retrieved from
<http://journals.sagepub.com.exp.waldenulibrary.org>
- Weng, J., Ji, L., Jia, W., Lu, J., Zhou, Z., Zou, D., ... On behalf of Chinese Diabetes Society. (2016). Standards of care for type 2 diabetes in China. *Diabetes/Metabolism Research and Reviews*, 32(5), 442-458.
doi:10.1002/dmrr.2827

- Wiebe, D. J., Helgeson, V., & Berg, C. A. (2016). The social context of managing diabetes across the lifespan. *American Psychologist, 71*(7), 526-538.
doi:10.1037/a0040355
- Williams, J. C. (2016). *A roof over my head*. University Press of Colorado. Retrieved from <https://scholar.google.com/>
- World Health Organization (2017). Proposed working definition of an older person in Africa for the MDS project (n.d.). Retrieved from <http://www.who.int/healthinfo/survey/ageingdefnolder/en/>
- Yin, R. K. (2012). *Application of case study research*. (3rd ed.). Thousand Oaks, CA: Sage
- Yin, R. K. (1994). *Case study research: Design and methods* (2nd ed.). Newbury Park, CA: Sage
- Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed.). Thousand Oaks, CA: Sage

How Diabetes Affects Your Life.



**Hello, you are invited to participate in a study about
Diabetes**

- + Have you been diagnosed with diabetes?**
- + Are you the age of 55 and not older than 64 years old?**
- + Have you lived here for at least two weeks?**

The purpose of this study is to explore the experience of Type 2 diabetes with women who are homeless. The benefit is to promote awareness about how you manage your diabetes.

Participants will receive a Subway gift card value \$15. You do not have to be employed to participate or meet any other qualifications. No medications will be offered.

Appendix B: Interview Protocol

Interview Questions – Open-ended questions

Hi, I am Joan. Thank you for coming and participating with me, in my study. I really do appreciate your time. I will be asking some questions, and you can take your time to answer them, there is no rush.

1. I know dealing with diabetes is not easy. Could you please tell me what is it like for you to live with Type 2 diabetes?
2. How do you manage every day?
 - (a) Thank you for letting me know, can you share more about your routine?
3. Thank you, and how do you check your blood pressure?
4. Please let me understand, when do you check your blood pressure?
5. Please tell me about your diet and how do you feel about diet plan?
6. How do you get help to get your medications?
 - (a) Can you tell me please, how you manage with transportation?
7. What about insulin, how do you use insulin to manage your diabetes?
8. How did you let the nurse or the doctor know that you need help when it comes to testing your blood sugar on your own?
 - (a) How do they help you, please tell me more?
9. How do you secure your belongings?
10. How did you feel when you learned you had diabetes?
11. What role does your family play to help you with your care?
 - (a) What about friends, how do they help to care for you?

- (b) What kind of support does this facility offer?
 - (c) Can you kindly say, how is it helping you?
12. What role does exercising play in your daily routine?
- (a) Thank you, is there anything else, you want to tell me about your interest in exercising or your concerns about care?
13. I know that not having a place to call your own is tough but what motivates you to get up and go to work every day?
- (a) Thank you so much, tell me more about this?
14. What do you feel is your biggest problem when it comes to managing diabetes?

I do thank you so very much for your time and patience with me. It was a pleasure talking with you, enjoy the rest of your day.