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Perceptions of Patient-Healthcare Provider Relationships in the Management of Type 2 Diabetes

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This is to certify that the doctoral dissertation by

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has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
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Walden University
2024

Abstract

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by

Desiree D. Lacey, MPH, RRT, RCP

MPH, Walden University, 2008

BSRT, Texas Southern University, 1983

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Public Health

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Abstract

The patient-healthcare provider relationship (PPR) is the foundation of clinical care: it is established as a human relationship and has a profound effect on health outcomes. Though PPR has been studied in multiple health domains, there is very little on its role in managing Type 2 diabetes mellitus (T2DM). The purpose of this phenomenological qualitative research study was to better understand the challenges faced by healthcare providers (HCP) and T2DM patients within the clinical PPR for diabetes self-management. The health belief model served as the theoretical framework and the diabetes self-management education program as the conceptual framework. Participants were recruited through medical groups, public bulletin boards, and organizations supported by the American Diabetes Association. In-depth interviews were conducted with physicians and other healthcare providers and T2DM patients. Data were recorded, transcribed, coded, and analyzed to identify emergent themes. Data analysis was done manually and by using the NVivo qualitative software. Five themes emerged: (a) Most patients recognize the importance of the PPR, (b) many patients have grievances with medical treatments, (c) HCPs consider trust and respect essential in the PPR, (d) patients want to feel acknowledged by their provider and seen as human beings, and (d) providers recommend more time with their patients and more willingness to forge a partnership with them. Positive social change derived from the study may include T2DM interventions that improve patients' desire to reduce T2DM, relevant technological innovations to assist in enhancing diabetes self-management, and improved effectiveness of communication between the HCPs and T2DM patients.

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Dedication

First, giving honor to Jesus Christ, our Lord and Savior, who has made this journey possible. I would like to dedicate this dissertation to my father, the late Robert H. Lacey (1974), my grandmother, the late Estella Morgan (2000) and my step-father, the late Thomas J. Small (2012). I would like to thank all of them for laying the initial pathways down for me to begin my academic journey and the celebration of their lives given to me!

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Coordinator. Every day of this journey she has supported, guided, and never let me put the beaming torch down, and she has continued to encourage me to run the full vibrant race until the end. For this, I will always be eternally grateful and will always love her to the moon and back!

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Chapter 1: Introduction to the Study

Introduction

The American Diabetes Association (ADA, 2020) recognized Type 2 diabetes mellitus (T2DM) as a metabolic disease characterized by elevated glucose levels, which over time can lead to severe damage in many major organs. According to the Centers for Disease Control and Prevention (CDC, 2019), an estimated 1.5 million Americans are diagnosed with diabetes each year though roughly one in every five of them does not know they have the disease, and T2DM accounts for 90 to 95% of diabetes diagnoses (CDC, 2019). Once the patient is diagnosed with T2DM, their relationship with the health care provider becomes crucial, and it becomes important to establish an effective provider-patient relationship (PPR). In this chapter, I introduce the research problem and discuss key elements related to the effectiveness of the PPRs relationship.

Taking care of chronic illnesses like diabetes requires a unique PPR where patients can be empowered through diabetes self-management programs and diabetic education (ADA, 2015). Trust is essential to patients and may be an accurate indicator of how the individual evaluates their quality of health (ADA, 2017). Inadequate communication between the healthcare provider and the patient can cause delays in treatment and negatively affect health outcomes (Ley et al. 2016). Effective communication between the patient and healthcare provider is essential for the continued treatment plans for T2DM.

Diabetes self-management education (DSME) guidelines for diabetes patients is a tool used to improve the care of diabetes and its associated complications, however it

does not preclude cultural inclinations, preferences of diabetes patients, clinical judgments, and the integration of family dynamics - which can directly affect the patient. The goal of DSME is to provide the best clinical education with collaboration of the healthcare team, improve self-care behaviors, and health outcomes for the patient. According to Yace et al. (2018), future research is needed in the area of T2DM clinical settings in healthcare system levels between T2DM PPRs.

My goal for this study was to provide a deeper understanding of PPR perceptions between healthcare providers and patients in the management of T2DM to assist with the development of best practices. Potential social implications gained from this study could be to promote positive changes in PPRs that trigger improved health outcomes.

This chapter's major research sections include the background, problem statement, purpose of the study, and research questions to be addressed. I also discuss the theoretical foundation and conceptual framework, the nature of the study, definitions, assumptions, scope and delimitations, limitations and significance of the study.

Background of Study

The significance of an effective healthcare provider-patient relationship (PPR) was to improve the health outcomes for the patients. PPR can consist of interactions between the patient and their doctor or other related healthcare providers, such as nurses, dieticians and nurse practitioners, diabetes educators, or pharmacists that contribute to the care of the patients. Gordon and Beresin (2016) found that poor health outcomes can flow from impaired healthcare provider-patient relationships, as determined by metrics assessed after an encounter for behavioral, objective, and subjective measures. Several

reasons can account for the shift of changes between PPR partnerships. The quality of communication exchanges must be developed during PPR interactions, which can directly impact the future health outcomes for the patient.

Some qualitative research studies have explored that the relationship between the T2DM patient and physician is becoming strained and can expediently impact the effectiveness of the provider-patient relationship. According to the World Health Organization Conference (WHO) findings (WHO, 2017), physician/healthcare providers have seen an increase in medical commercialization and specialization for medical practices. These practices have placed heavier diagnostic reliance's on advanced technology at a higher financial cost of meaningful interaction between the persons seeking medical care and health care providers at a human level. The pressing demands on the physician's time and heavy reliance on technology to complete diagnostic and therapeutic practices lead to lessening the time for the personal touch that is sometimes necessary to continue effective communications between PPR. Key elements in effective PPRs include trust, knowledge, and loyalty, which all assist in forming the bond between the provider-patient and can be directly correlated with the patient's health outcomes (Chipidza et al. 2015). A therapeutic relationship was developed through the key elements of effective PPRs.

Achieving a good therapeutic relationship requires effective communication between the healthcare provider and the patient. It was significant that the healthcare provider provided empathy toward the patient and contributed positive participation toward the PPR. A strong therapeutic relationship between the patient and physician has

created a 'bridge of excellence' of healthcare for the patient (Mitsi et al. 2018). An effective PPR is represented through therapeutics. An effective PPR was, by definition, a therapeutic relationship. Also known as a *therapeutic alliance* this is a specialized human relationship in which the patient and the healthcare provider work toward specific goals using special activities or purposeful tasks (Mitsi et al., 2018). A gap of knowledge that I addressed was future research in the T2DM clinical settings in the healthcare system between T2DM PPRs. Therapeutic characteristics such as sincerity, congeniality, and empathy are also contributing key elements for an effective PPR.

Several PPR categories can be contributing factors for the effectiveness of the PPR interrelationships. These provider categories can be categorized into several groups, which directly affected the style of care provided by the provider-patient relationships. These categories are summarized as patient-dependent provider (the patient is dependent on the provider for everything), provider-dependent (the provider likes to be in control over the PPR relationship), healthcare system-dependent (the relationship is dependent on the practicing healthcare system the partnership is involved with), or the mismatch of PPRs (the PPR partnership is not a workable relationship) (Chipidza et al. 2015, Wayne al, 2017). Solutions to each affected doctor-patient relationship can be rooted through the key components of knowledge, trust, loyalty, and regard. Several years ago, it was common for patients to regard their family physician as part of their family and extended trust beyond medical needs. Time has slowly changed the perceived relationship between the patient and physician and had been identified as a significant working element in PPR. The research study was needed to address and identify the effectiveness of PPR

relationships in managing T2DM by determining what was required to improve patient health outcomes. This study's potential social implications could be improved communication and competence, better treatment adherence, and a better quality of life.

Strong therapeutic relationships are needed in maintaining successful diabetes self-care management programs for T2DM patients and improved health outcomes. According to Clark et al. (2017), one of the most effective approaches is guided by theoretical context. The thoughts and behaviors of T2DM patients within this study of Clark et al. (2017) was to assess the broader perspectives of caring for the whole T2DM individual (Clark et al. 2017). Healthcare providers use the theoretical approaches to process the clinical information in systemic order and create some form of order out of chaotic clinical data (Clark et al. 2017). This method could be used in transitioning order in sometimes chaotic clinical information. In this study, I also addressed and identified the effectiveness of PPR relationships in managing T2DM by determining what was required to improve patient health outcomes.

Problem Statement

The identified problem was the effectiveness in therapeutic relationships between patient-healthcare providers (PPR) in the management of T2DM. Low levels of effectiveness in therapeutic relationships, which included barriers to access to healthcare, inadequate communication exchanges, medical literacy and decreased health outcomes, was identified between patient-provider relationships in the management of T2DM (Clark et al. 2017). Establishing a strong foundation for trusting and developing positive therapeutic relationships between patients, caregivers, and healthcare professionals was

important (Paiva et al. 2019). However, there was a gap in the literature relating to developing effective therapeutic PPRs in clinical settings, and more research is needed (Agbre, et al. 2018).

One of the key factors that was significant in the establishment of strong PPRs is trust (Gerchow et al. 2021; Paiva et al. 2019). There are studies showing that inadequate communication exchanges between healthcare workers and their patients adversely affect health outcomes for self-management diabetes education programs (Agbre et al. 2018). Achieving effective communication and empathy from the healthcare provider to the patient is essential in achieving positive therapeutic relationships.

Other components such as loyalty and knowledge gained within the PPR can positively or negatively impact the patient's future health outcomes; according to Neuberger et al. (2019), these components contributed to the patient's view of the credibility of the provider's medical expertise and professional opinion. In this study, I gathered information from healthcare providers regarding the significance of effectiveness PPR and how this affected the patient's decision to seek out their healthcare services. I used a phenomenological approach to understand meaningful and life-changing experiences, such as those significantly impacting PPRs such as trust, knowledge, and loyalty.

Purpose of Study

The purpose of this phenomenological qualitative research study was to better understand the challenges faced by healthcare providers and T2DM patients within the clinical setting PPR for diabetes self-management. The existing PPR challenges seemed

to need additional research in alternative strategies in T2DM management education programs. Though many contributing factors can be recognized regarding PPRs, change was still not happening. I developed qualitative research questions to explore the experiences of healthcare providers and patients. The theory of health belief model (HBM) and the conceptual framework of diabetes self-management education (DSME) was used to explore how and why healthcare providers' behavior seemed to be changing so slowly (Chandra et al. 2018). Additional strategies for developing the qualities of trust, loyalty, and empathy were needed to assist in addressing the development of effective therapeutic relationships between – healthcare providers and patients and identified challenges that are faced in this partnership.

Research Questions

Research Question 1 (RQ1): What are the perceptions of patients (ages 24-75) with Type 2 diabetes mellitus (T2DM) regarding their therapeutic relationship with healthcare providers as it relates to the constructs of the health belief model, and the DSME standards?

Research Question 2 (RQ2): What are the perceptions of healthcare providers with Type 2 diabetes (T2DM) patients regarding their therapeutic relationship with patients as it relates to the constructs of the health belief model, and the Diabetes Self-Management Education standards?

Research Question 3 (RQ3): What are the recommendations of T2DM patients and healthcare providers on how to address any challenges in their patient-physician relationship, as they relate to the constructs of the health belief model?

Theoretical and Conceptual Framework

The primary theoretical framework for this study was the health belief model (HBM), which laid out behavior changes that might be expected to occur in the self-management of diabetes. The conceptual framework was drawn from the CDC National Standards of Diabetes Self-Management Education (DSME) in which the role of the PPR was a key element (CDC, 2017). The DSME describe guidelines for T2DM care, which includes an effective channel of understanding between the physician/healthcare provider and the patient. DSME education supported guidelines for T2DM individuals to change their behaviors and lifestyles (Anderson, 2015). The DSME guidelines demonstrated for those individuals that developed new, altered lifestyle changes for T2DM treatment plans manifested changed behaviors with the assistance of their patient-healthcare provider relationship.

Health Belief Model

The HBM is a recognized health behavior theory which suggests than an individual's decision to adopt a positive health behavior is directly influenced by the individual's negative health consequences, the determined risk factors perceived, obstacles, and the associated benefits with interacting with this behavior (Zare et al. 2020). According to Zare et al. (2020) factors of the HBM include (a) the individuals' perceptions of their susceptibility to the specific illness, (b) the severity of the illness, (c) the obstacles the individual may face with dealing with the illness (this could include their family), and (d) the actual benefits of changing their lifestyle or behavior, pertaining to the illness. The HBM describes the stages of behavior change. I used the HBM to

identify the elements of the patient's healthcare providers' behaviors. The HBM is focused on six constructs including: (a) perceived susceptibility, (b) perceived severity, (c) perceived benefit, (d) perceived barriers, (e) cues to action, and (f) self-efficacy (Zare et al., 2020). I selected HBM as the theoretical framework for this study to examine the ways that patients with T2DM perceived their therapeutic relationships with their health care providers in health challenges through diabetes complications, severity of complications, perceived barriers to diabetes treatments, perceptions of susceptibility to the risk factors of T2DM, and self-efficacy in diabetes self-management programs. I used the HBM to explore the behaviors and any changes between the physician /healthcare providers-patient relationships.

Diabetes Self-Management Education

The ADA's educator's standards (2016) for DSME contained evidence-based foundations to empower individuals with diabetes with the ability to navigate through self-management decisions and activities steps for diabetes patients and self-management support. These standards delineate the most effective strategies used for the management of education (CDC, 2018). DSME is one of the key components of implementing effective T2DM care for the patient's diagnosed with T2DM (CDC, 2018). The patient must be empowered through diabetes self-management education, and effective communication exchanges must be developed by the partnership of the PPR. Trust, loyalty, and knowledge was three key elements of these standards, which assist in the development of strong bonds between PPRs. These three key elements also directly impacted the patient's health outcome in positively or negatively way (Chipidza et al.

2015). The key elements were expected to be prominent in the data, during the interview phase. DSME programs are intended to improve preventive practices with PPRs among people with diabetes. Approximately 1.1 million T2DM patients have participated in DSMES programs recognized by the ADA or accredited by the American Association of Diabetes Educators in 2016 (CDC, 2018). The DSME national standards was evidence-based educational steps used to assist in the combined relationship between the patient and physician to achieve T2DM interventions and guide educators in achieving successful health outcomes.

Nature of Study

The nature of the study was qualitative because the objective was to examine the perceptions in the clinical settings between the patient-healthcare provider relationships in the management of T2DM, using a phenomenological approach, which identified the essence of the participants' lived experiences in their PPR. Data was obtained through in-depth individual one-on-one interviews with patients and healthcare providers (which consisted of physicians, nurses, educators, and related healthcare providers) (Neuberger, et al. 2019). Researchers used this approach to uniquely position the participants to share their experiences of the phenomena under investigation and what the experience actually meant to them.

Participants were recruited by the distribution and posting of recruitment fliers in physician offices, grocery & laundry mats bulletin boards, American Diabetes Association Resource Centers, and in several churches bulletin boards. The participants were made up of T2DM individuals and healthcare providers. The interviews were

conducted face-to-face using semistructured, open-ended questions to collect the data. The interview process included the use of appropriate personal protective equipment (PPE), and disinfectant procedures between each interview to be in compliant with the Texas state mandated rulings for Covid-19 or the use of video telephony (when needed) and online chat services through a cloud-base software peer-to-peer platform for teleconferencing (Zoom, 2019). The phenomenological approach was helpful with understanding issues pertaining to meaningful and life-changing experiences, such as those that significantly impacted the PPR such as trust, knowledge, and loyalty. It was hoped that through this study, using the theoretical framework of HBM and conceptual framework DSME, the data found had drawn attention to factors that improved therapeutic PPRs and altered health behavior changes to impact healthcare services.

Definitions

Body mass index (BMI): A measurement of the accumulative fat in the body based on the ration of weight to the height measured in kg/m2. A high BMI indicates a high percentage of fat in the body (CDC, 2017a).

Blood glucose: The primary source of sugar that is found in the blood and the major source of energy; blood glucose is also known as blood sugar.

Diabetes: A condition in which the body is unable to produce sufficient insulin to adequately control the glucose levels of sugar (CDC, 2017b).

Diabetes self-management education: The National Standard for DSME designed quality education programs specifically targeted to assist diabetes educators in multiple learning areas to provide evidence based education. Because of the dynamic nature of the

chronic disease of T2DM and related research, the standards are reviewed every 5 years by specific organization and federal agencies within the diabetic community (CDC, 2018).

Effective communication: This is the process defined by verbal speech or other methods of communication that allows the point to be understood. Effective communication allows the communicator the ability to listen to others and communicate their own opinion or ideas to the receiving audience (Foronda et al. 2016).

Endocrinologist: A physician that specializes in balancing and maintaining balanced hormones. The common diseases and disorders that the endocrinologist manages, but is not limited to includes (a) diabetes mellitus, (b) metabolic diseases, (c) infertility, (d)osteoporosis, (e) pediatric endocrine diseases, (f) high blood pressure associated with endocrine dysfunctions, (g) high blood cholesterol or lipid abnormalities associated with cardiac diseases, and (h) thyroid disorder (Baum, 2018).

Fasting blood glucose: The measurement of sugar in the body (blood glucose) after fasting overnight (normal range–70-100mg/dL diabetic range is> than 123 mg/dL) (Okur et al., 2017).

Glucagon: A produced hormone from the pancreas that increases the level of glucose (or sugar) found in the blood (CDC, 2017a).

Glucometer: This device is used to monitor the blood glucose levels in your blood. The glucometer is also known as a glucose meter or blood glucose monitoring device. This device can be used in the home environment or in a health-related setting (Dexcom, 2020). The glucometer is a quantitative test, which means that the numerical

results presented will find out the amount of glucose (sugar) identified in that specific blood sample.

Healthcare professional: Under federal regulations, a healthcare provider is defined as a physician (doctor of medicine or osteopathy), physician assistant, nurse practitioner, registered or vocation nurse, dentist, clinical psychologist, respiratory care practitioner, optometrist, or a clinical social worker who is deemed to practice by the state and performs within the scope of their profession, which is defined by law (CDC, 2017a).

Hemoglobin A1C (HbA1c): Measures the history of your blood glucose over intervals of two to three months. HbA1c is the indicator for diabetes that assists in tracking and monitoring how controlled the disease state of diabetes is regulated in the body. High levels of HbA1c may increase the risk of diabetes complications (Okur et al. 2017).

Insulin: A produced hormone that enables the body to transform glucose to energy. The pancreas produces the beta cells that develop into insulin. When the body is not able to supply enough insulin, the alternative method of injections of insulin or other means are implemented (Okur et al. 2017).

Insulin resistance: The body's inability to respond to, act, and use produced insulin. Insulin resistance can be associated to disease processes such as: (a) obesity, (b) elevated levels of fat found within the blood, and (c) hypertension. The causes of insulin resistance can also be associated with genetics (inherited) and the individual's lifestyle factors. Insulin resistance precedes the development of T2DM (Okur et al. 2017).

Patient compliance: describes the degree in which the patient follows medical advice correctly (Ho, 2017).

Pancreas: The organ that is responsible for making insulin and enzymes for digestion. The pancreas is found behind the lower quadrant of the stomach. The pancreas includes endocrine functions, which release juices directly into the bloodstream and exocrine functions, which releases juices into the ducts (CDC, 2017a).

Perception: A belief or opinion of understanding, interpreting or an intuitive insight to something (Ho, 2017).

Pre-diabetes: A condition which blood glucose levels (sugar levels) are higher than normal but are blood glucose levels not high enough to be classified as full-blown diabetes in laboratory ranges (CDC, 2017a).

Assumptions

I made several assumptions in this study. I assumed that the participants with T2DM were honest, competent, and willing to share accurate information about their personal life experiences with diabetes and their relationship with their healthcare provider; however, the healthcare provider may not be as open to share clear and accurate information regarding PPR. I also assumed that participants with T2DM would follow instructions and others do not follow medical advice from their healthcare provider for adherence of ongoing diabetes self-management care regimen which could prevent or delay complications for T2DM. This assumption was significant in establishing an effective therapeutic relationship between the patient and healthcare providers (Peyrot, 2015). The T2DM participants who met the criteria participated in the study voluntarily

and were free to discontinue their participation in the research study, if they changed their intents. The assessment of the T2DM participants' perception about PPRs in the prevention of T2DM would yield significant results that could improve long term health outcomes and adherence to diabetes self-management programs. My final assumption was that the findings could have positive impacts on the T2DM participants, healthcare professionals, family, and community members.

Scope and Delimitations

The specific aspects of this research problem that was being addressed in this study was to identify perceptions of effectiveness between the PPR in the management of T2DM in the clinical settings. The scope of this study focused on men and women diagnosed with T2DM (non-insulin dependent or insulin dependent individuals), the individual had health insurance, health care professionals who resided or practiced in the metropolitan Houston areas inclusive of Harris county with 10.1% diagnosed in 2017, Fort Bend county with 11.8%, and Galveston county with 11.1% diagnosed in 2017 (CDC, 2020). These three demographic regions were researched due to their diagnosed percentage of less than 10%. The ages determined are between 24 to 75 years' old who are diagnosed diabetes stratified by national age percentage (CDC, 2020). The healthcare provider's scope of practice included the T2DM patient, non-insulin dependent or insulin dependent patients, confirmed health insurance, and fell within the age range of 24 to 75 years old. All ethnic groups are included. It was important that the study population demonstrated transferability by showing the sample fairly represents the targeted population.

Limitations

There were several limitations to the findings that were identified with this study. The recruitment and participation was inclusive of all ethnicities, thus limiting specific-related ethnicity experiences with diabetes and its health complications. Due to limited sample size for these study-responses and code by racial/ethnicity would not be substantial to develop significant patterns. The majority of participants were all from the same geographical areas of Houston, Texas and one outliner from Fairfield County, Connecticut. The cultural perceptions of the T2DM participants played a role in understanding the questions and their individual responses, during the interview process. The limitation of this study was only derived from the data collection process of the T2DM participants on PPRs and the outcomes of DSME programs. Some of the participants were uncomfortable in participating due to the nature of the questions that were asked during the interview process although the interview process was completely confidential. Other concerns included recruitment of T2DM high risk participants concerned with their underlying disease process of diabetes and possible health exposures during the COVID-19 pandemic.

Two main biases that influenced the study was: (a) participant bias and (b) researcher bias. Participant biases could stem from what the participant anticipated the correct answer might be to the questions or what is accepted by society; instead of answering – how the individual truly feels. Researcher bias reflects unknowingly interpreted data being introduced to meet what was thought to be relevant to the researcher's study (Matthys et al. 2017). The attempt to stay objective and minimize any

biases throughout the study was always of foremost importance to the researcher. Reasonable measures that can be taken to minimize and address limitations was by using neutral questions or randomized response techniques, throughout the in-depth interview process.

Significance of the Study

A positive therapeutic relationship between the patient-healthcare providers was significant for effective communication exchanges for T2DM management treatment regimens and management programs. The development of therapeutic relationship in the clinical settings between PPRs established strong healthcare provider-patient relationships, effective communication exchanges and specific contributed factors to improve the quality of care for patient health outcomes in T2DM patients. Relationships between patients and healthcare providers affect people of every gender, race, and age. In this study the researcher took a closer look at why patients often perceived differences with their healthcare providers in receiving sufficient health information and the lack of abilities to participate in their own management of T2DM treatment regimens and diabetes management programs at the healthcare system level. Identifying the needs to strengthen therapeutic relationships between healthcare providers and patients also allowed decision-makers the opportunity to recognize the importance of this relationship on the quality of care (Matthys et al. 2017).

The results of this study may assist with positive social changes allowing healthcare providers the opportunity to gain alternative DSME educational pathways to strengthen relationships between their patient-healthcare provider partnerships, alter

healthcare behaviors within the PPRs, and T2DM treatment strategies that addresses this specific patient population. Potential future contributions of from this study could be toward the development of effective therapeutic relationships between the healthcare provider and patient at the healthcare clinical system level. The ability to understand the perceived beliefs between patient's and healthcare providers also contributed to how T2DM affects the behavior and adherence for noncompliance of medication regimens.

Significance to Social Change

The PPR is an essential component for the success of developing positive health outcomes. One of the key components that are essential in achieving an inseparable partnership between healthcare providers and patients was clear communication. Effective communication exchanges were crucial for healthcare providers to ensure they worked together to reach the patients, caregivers, and families (Peyrot, 2015). Other significant goals to be considered was improved patient-healthcare provider - therapeutic relationships by strengthening the PPR partnership and working on effective communication strategies within the levels of the healthcare system (Foronda, MacWilliams & McArthur, 2016). One attribute that was considered toward social changes in this study was to establish stronger therapeutic foundations between the T2DM patients and healthcare providers, on a consistent basis. In this study, the focus was on essential factors that contributed to understand factors that influence the PPR relationship in T2DM clinical settings. The findings of behavioral data obtained from healthcare providers through the use of the HBM model had contributed to understanding the slow changes in the management of DSME programs for PPRs. This current study

also contributed to interesting findings regarding what patients especially focus on, concerning their diabetes, which could be used to improve the interactions in PPR summary.

There remains a challenge with communication between the T2DM patient and healthcare providers, which directly impacted the effectiveness of their PPR in clinical settings. The intent of this study was to examine the perceptions between the T2DM patients (life experiences) and healthcare provider's behavioral relationships. One of the existing problems was that the patient-healthcare provider's relationship needs to be improved in the management of T2DM education programs. Through the use of the HBM theory and conceptual framework of DSME, research indicated there was existing evidence that was used to explore if any changes in healthcare providers' behaviors had been identified over the past years. Findings from this study provided a better understanding for different perceptions to be identified between the T2DM PPRs for DSME programs, which was used to improve future education strategies and improved health outcomes for patient and healthcare provider's relationships.

The focus of the study was on the lived experiences of T2DM patients and assess healthcare provider's behaviors regarding their relationship of PPR in T2DM clinical settings and the effectiveness of their communication, which is essential to the provision of high-quality medicine. After the completion of this study, newly found data will assist in the development of strategies by the integration of HBM and effective communication techniques implemented between patients and healthcare providers. Chapter 2 contains a

review of literature on the nature, causes, strategies explored by the perceived PPR and the theoretical frameworks of this study.

Chapter 2: Literature Review

Problem Statement

The problem that I examined in this study was the low level of effectiveness in therapeutic relationships between patient-provider (PPR) in the management of T2DM. Low levels of effectiveness in therapeutic relationships, which included barriers to access to healthcare, inadequate communication exchanges, and decreased health outcomes, has been identified in patient/physician relationships in the management of T2DM (Clark et al. 2017). It is important to establish a strong foundation for trusting and developing positive therapeutic relationships between patients, caregivers and healthcare professionals. There was a gap in the literature relating to the development of effective therapeutic PPRs in clinical settings, and more research was needed.

Purpose of Study

The purpose of this phenomenological qualitative research study was to better understand the challenges faced between healthcare providers and T2DM patients within the clinical setting for diabetes self-management. The existing PPR challenges seemed to need additional research in alternative strategies in T2DM management education programs. Though many contributing factors of concerns by T2DM patients were recognized regarding PPRs, change was still not happening.

I used the HBM and the DSME to explore how and why physician behaviors seemed to be changing so slowly. Additional strategies for developing the qualities of trust, loyalty, and empathy were needed to address the development of effective

therapeutic relationships between healthcare providers and patients and identified challenges that are faced in this partnership.

Evidence has demonstrated that inadequate PPR relationships could lead to major obstacles in the care of T2DM patients (Yale et al. 2018). There was an apparent gap in the literature regarding factors that contributed to the patient and physician communication regarding effective T2DM patient care. According to Yace et al. (2018) there remained a serious challenge with PPR communication exchanges that directly impacted the relationship between the T2DM patient and physician.

The major sections of Chapter 2 include (a) strategies for literature research, (b) theoretical and conceptual framework, (c) literature on provider-patient relationship, (d) literature on the role of PPR health outcomes, and (e) training models for effective PPRs.

Strategies for Searching the Literature

I conducted a systematic literature review to investigate PPR in the management of T2DM. The literature sources that I identified through the databases and search engines were peer reviewed journals articles, books, and dissertations. I used the following websites to retrieve sources: Cochrane Data Base of Systematic Reviews, DARE, EBSCO host, Medline, Pub Med, Dissertations of Walden University Library, and Google Scholar. I focused on four different areas: (a) T2DM management, (b) PPRs, (c) the chronic care model for diabetes management, (d) poor medication adherence with T2DM patients, and (e) therapeutic relationships. I used the following key terms: medical mistrust, trust, health literacy, poor medical communication, physician-patient communication, research gaps, therapeutic relationships, and T2DM patient perceptions.

Key search terms for T2DM included: pre-diabetes, diabetes, chronic diseases (T2DM), T2DM medication treatments, adherence, compliance, enhancements of medical technology, communication, patient-centered care, relationships, and communications. I filtered key literature search terms for healthcare provider's education by the date ranges of 2003 to 2022 to ensure the most recent research and educational training protocols and included the key terms: provider education, physician education, healthcare provider education, healthcare, provider training, communication, physician behavior, provider, and behavior. The key search for researching health belief model constructs were mind/body treatment, relationships communication, patient center care, behaviors, key constructs, influences, and barriers.

Theoretical and Conceptual Frameworks

The theoretical framework for this study was the health belief model (HBM), while the conceptual model was drawn from the standards of DSME as developed by the American Diabetes Association. The DSME standards, supplemented by the HBM constructs of behavior change, especially self-efficacy, guided the data collection and analysis, and generated a first set of recommendations for advancing DSME standards in clinical settings. HBM interventions had a key construct directly affecting individual key components in the promotion of self-care behaviors, improved healthcare provider-patient communication interactions, and positive patient-centered communication relationships (Finney Rutten et al. 2016; Zare et al. 2020). The use of HBM interventions resulted in changes such as an individual's knowledge, attitudes, and skills that could be used to raise self-care outcomes. The HBM interventions were also used to explore the

positive or negative behavior changes in the T2DM patients, as well as the healthcare providers.

The Health Belief Model

The theoretical model of HBM was developed in to United States to explain why there was a lack of participation in health promotion and disease prevention programs (Zare et al. 2020). Later in 1966, HBM made advances in health promoting behaviors and has been used in patients with T2DM (Zare et al. 2020) The HBM contains six concepts that predict why individuals choose specific actions to prevent, conceal, or control illness conditions. These are: (a) perceptions of susceptibility to the illness, (b) the seriousness of the illness, (c) the benefits of and barriers to specific behaviors, (d) cues to action, and (e) self-efficacy (Zare et al. 2020). Evidence supported that theory-based interventions was key components in promoting self-care behaviors and effective therapeutic relationships (Kushner & Mechanick, 2016). The use of the HBM theory was closely aligned to the practicality for the development of effective therapeutic relationships between the patient-healthcare providers.

HBM encompassed construct tools that aided in strengthening PPRs through the use of effective therapeutic relationships in the clinical settings. The construct of perceived susceptibility refers to the individual's belief on the chances of getting a specific condition or health disease (Zare et al. 2020). The PPR begins as the patient initially sets up their physical consultation with their specific physician or healthcare team member. The PPR's initial alignment of the individual's perceived susceptibility

and initial medical consultation established a key component to developing a strong relationship.

The next HBM construct tool that was used by individuals was through perceived severity. Perceived severity refers to the individual's feelings about contracting an illness. The individual contemplates whether to treat or not to treat the health condition, and the consideration of social impact consequences related to family life and/or social relations. This perception of perceived severity is very important for the patient to understand and to be educated on the disease process. The combination of perceived susceptibility and severity could be identified as perceived threat (Zare et al. 2020). An effective therapeutic relationship is significant in the conceptual level of perceived severity between the patient and the physician. The key components of trust and knowledge are directly related to perceived severity construct.

Another level of the HBM is the perceived benefit of an action. The perceived benefit referred to the individual's psychological costs and/or tangible actions pertained to advised action, unless the health action was perceived as a potential benefit by reducing the threat (Zare et al. 2020). It is important that the patient understands the tangible actions or psychological costs of changing their lifestyle to adapt to the changes needed to adapt to the new health conditions. The patient needs to be educated to identify any related health changes with this health issue. The patient-physician therapeutic relationship should have had a comprehensive understanding of the patients' medical interventions needed and expectations.

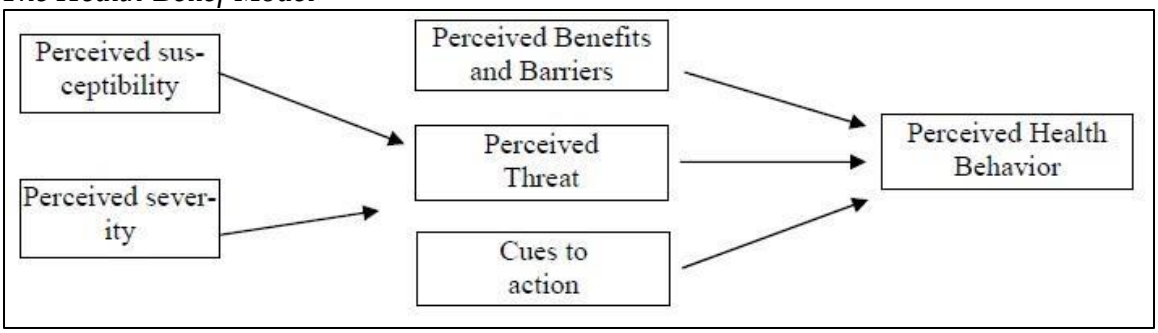
The next level of the HBM construct tools used is perceived barriers. Perceived barriers refer to the individual's perceived negative impact of a specific health action that can be demonstrated as impediments to undertaking recommended behaviors (Zare et al. 2020). It is important that the patient deals with their perceived barriers of health, so they may change the perceptions of their health issues. The perceived barriers are an important conceptual tool of developed trust between the patient-physician therapeutic relationships. At this level, the patient's physician directly shares the levels of trust, compassion, and empathy within their relationship. It is important that these therapeutic characteristics was developed between the patient-healthcare provider's relationship to change the perceptions of the construct tools of perceived barriers.

The second to last aspect of the HBM is cues to action. Cues to action refer to individual cues that can trigger actions through the constructs of HBM (Zare et al. 2020). A cue to action is a necessary tool in the promotion of prompting interactions with changes in individual behaviors. Through the interrelationship of the PPR, cues to action can come in forms of promoting awareness together and employ reminder systems.

The last HBM construct is self-efficacy. Self-efficacy refers to the individual's ability to promote changes in their behaviors and produced outcomes (Zare et al. 2020). One of the significant factors in the self-efficacy construct is the desired behavior changes and the ability to make changes to promote improved health outcomes. Self-efficacy is also related to one's ability to take action (Zare et al. 2020). Together as a team, the patient and physician can continue to move toward promoting an effective therapeutic relationship. Figure 1 presents a depiction of the health belief model.

Figure 1

The Health Belief Model



One of the cornerstones of effective treatment for lifestyle behavior changes in patients' lives was skillful and empathetic communication between the healthcare providers and the patient. From the patient's perspective, a physician possesses key characteristics of being compassionate, empathetic, trust-worthy, open–minded, and nonjudgmental (Kushner & Mechanick, 2016). The healthcare professionals also should take into consideration the patient's beliefs, attitudes, lifestyle, behaviors, goals, fears, and personality traits.

In the development of an effective therapeutic relationship between the patient and physician, it was a significant that there was a shared understanding of the patient's health goals. Several scholars have pointed out several literature reviews, Kushner & Mechanick (2016) discovered the HBM demonstrated that the use of effective communication skills exchanged between healthcare providers and patients directly correlated with improved patient health outcomes. Other recent research has attempted to address evidence that was lacking regarding the availability of effective tools for quality communication between healthcare providers and the patients. The essential principles of communication and behavior changes was gained through skill based pathways found

using scientific theories and models, such as HBM (Zare et al., 2020). In this study, I used the HBM to understanding behavioral change for patient and healthcare providers.

It was important to remember that essential communication interactions and counseling to patients must be explained and consideration must be taken into account for the patients' access to care, economic situation, social support, culture, and health literacy. HBM theory aided in the transitioning of behavioral changes through the constructs. HBM built its foundation on health-related behavior changes. The use of the individual constructs was very useful and the health outcome of interest must always be considered; however, the most effective use of HBM should be integrated with other models such as the selected conceptual framework of Diabetes Self-Management Programs. The use of the research questions will further explore the perceptions of patients and healthcare providers in PPRs.

Diabetes Self-Management Education

DSME is an ongoing learning process of knowledge, skill, and developed abilities necessary for self-management of diabetes care. The process encompassed the needs of the individual, goals, and life experiences of individuals faced with diabetes and are guided by evidence-base practices. The objectives of DSME are to support: (a) informed decision making, (b) the development of self-care behaviors, (c) strategies for problem-solving, and (d) the collaboration between the patient-health care providers, improves the long term goals of the individual's health status and clinical outcomes and to improve the overall quality of life (Clark et al. 2017). Comprehending the process of the DSME

program could assist in the lifestyle and behavioral changes that was needed to address improving the patient-provider relationship.

A task force was jointly convened by the ADA and the American Association Diabetes Educators, inclusive of, but not limited to these organizations of support for the strategic planning of DSME strategies: (a) American Dietetic Association, (b) the Veterans Health Administration, (c) the Centers for Disease Control and Prevention, (d) the American Pharmaceutical Association and (e) the Indian Health Services. Task Force members can include, but are not limited to: (a) individual persons diagnosed with diabetes, (b) registered nurses, (c) researcher, (d) behaviorists, (e) registered dieticians, (f) pharmacist, and (g) other related health care providers (Clark et al. 2017). The DSME task force convenes reviews and updates the DSME standards every 5 years or sooner if it is necessary. The DSME golden standards was as followed:

Standard 1

The DSME entity has a defined organizational structure, purpose, mission statement, and goals, which recognized and support the quality of DSME. DSME was recognized to be one of the most significant key components in the care of diabetes (Clark et al. 2017). In order for the T2DM individual to establish their self-efficacy and adapt to behavior changes through HBM, the DSME program must have organizational structure, a defined purpose, and goals. The patient understood that in order to be successful in the DSME program, lifestyle changes and new behavior adaptations have to be achieved.

Standard 2

The DSME entity appoints an advisory committee to promote quality to obtain strategic guidelines for diabetes recipients. This group was comprised of, but not limited to only healthcare professionals, individuals diagnosed with diabetes, community members, and other related stakeholders (Clark et al. 2017). In integrating the HBM construct with DSME Standard # 2- the construct of "perceived susceptibility" could be aligned with this standard. The therapeutic partnership of the patient and healthcare professional allowed the individual to understand the etiology of diabetes and the changes that they will undergo to accept this diagnosis. The PPR must be at a level of development that exchanges of trust and honesty had been established between the partnerships.

Standard 3

The DSME entity identified the targeted diabetes population and resources necessary to meet the specific needs of the individuals (Clark et al. 2017). The DSME program sought healthcare providers and patients that had been identified and needed to implement self-efficacy diabetes programs. The healthcare providers and patient worked closely together to implement this program for changes in the D2TM individuals. Standard #3 works toward targeting the specific needs of the T2DM individuals and providing resources for these individuals to attain their targeted goals. In order for Standard # 3 to work, there must be an ongoing effective patient-physician relationship evolving.

Standard 4

The patient was introduced to a specific overseer for their tailored care during the DSME program. A designated DSME coordinator oversaw the planning, implementation, and the evaluation of the diabetes self - care management education process (Clark et al. 2017). The DSME coordinator communicated directly with the healthcare providers oversaw the individualized plan of care for the patient. The DSME coordinator was responsible for directly guiding the primary healthcare providers and then the healthcare providers directly to the patient. The DSME monitored the processes of the planning phase, implementation of the tailored program for the patient, and evaluated the programs outcome.

Standard 5

DSME provided one or more diabetes instructors. The DSME instructors was usually tailored to the needs of the individual patients. The DSME instructors could be diabetic nurses, social workers, nutritionists, residents, nurse practitioners (with the expertise in diabetes care), dieticians, pharmacists and other healthcare related professionals. This standard was known for the expertise of education for DSME interventions. These diabetes instructors were responsible for educating new and ongoing diabetes instructors in the specific areas that was needed for the DSME program (Clark et al. 2017). The T2DM patient was educated by their DSME educators and gradually began to change and adapt to a new lifestyle changes. The T2DM patient also began to change their daily behaviors toward their tailored DSME program and adjust to the learned

behaviors. The HBM constructs slowly demonstrated changes in the individuals. The conceptual tool of perceived severity can be addressed through Standard #7.

Standard 6

Written curriculum reflecting current evidence-based practice guidelines, with evaluating outcomes to develop the framework for the DSME entity. Content areas included were: (a) the diabetes disease process, (b) the incorporation of nutritional management for the care of diabetes management, (c) physical activities, which would be incorporated into their life style, (d) medication, (e) focusing on safety and therapeutic usage for maximum effectiveness of the diabetes medications, (f) monitoring blood glucose levels and other measuring devices, (g) preventing, detecting, and treating chronic disease challenges of diabetes, (h) strategies to promote psychosocial issues and concerns presented through this chronic disease, and (i) personal strategies developed health and behavior adaptations (Clark et al. 2017). Through the strengthened partnership developed between the patient-healthcare providers using the concepts of "cues of actions" of HBM allowed the patient to advance in these TD2M standards.

Standard 7

An individual assessment and education plan was developed collectively by the patient and DSME instructor. The focus always was kept on patient-centered regimens. The healthcare providers encouraged the patient to be open and honest while answering the questions. The objective selections of the educational plan were to support the diabetes self-management strategies (Clark et al. 2017). At this point, the patient and the healthcare providers worked closely together to develop this goal. It was important that

the patient understands and focused their behavior changes to adapt this crucial step with their healthcare providers. The patient adopted new behaviors they advanced through the individual assessment plans. The HBM concept of self-efficacy could be developed through the therapeutic partnership of Standard #7.

Standard 8

Personalized follow-up plan for the patient were developed for ongoing diabetes self-management support. The follow-up plan was developed collectively by the healthcare providers (Clark et al. 2017). The patient contributed to their personalized follow-up plan. The patient must clearly understand the personalized follow up diabetes care plan. It is the responsibility of the healthcare providers to make sure that the patient had been properly instructed and understands the DSME care plan. There should be ongoing communication interactions between the patient and healthcare providers regarding their diabetes self-management support processes.

Standard 9

The DSME entity would measure attainable patient defined goals and outcomes at regular time intervals. The received data was assessed, measured, and evaluated for effectiveness of the developed educational interventions. The patient should clearly understand the defined DSME goals. The patient should have methods to measure the attainable goals and effectiveness of educational interventions. Standard #9 is also known as the patient progress level (Clark et al. 2017). The healthcare professionals worked closely and monitored the patient's ability to be clearly assess their developmental progress during the DSME process.

Standard 10

The DSME measured the effectiveness of the education process and determine opportunities of continuous quality improvement plans, through a systematic review of entities' process and outcome data (Clark et al. 2017). As the standards of diabetes self-management education continued to address fundamental pathways through strengthened PPR partnership, the long term goals of DSME was to improve health outcomes, which could be reached in incremental steps with newly adopted behavior changes of the HBM model. The DSME program was an evolving tool kit that the healthcare professionals continued to educate and monitor the patient's progress.

Conceptual frameworks were developed by the summarization of images through themes and patterns that slowly emerge through the data. In summary, the guided theories of the HBM (behavioral changes) and the conceptual framework of DSME (the ongoing learning process of diabetes self-management) was delicately entwined through the researchers' understanding of how these themes and patterns connected with each other. The conceptual key was used to improve the healthcare PPR. This process became the researcher's map in investigating this study.

Effective communication skills between the patient and the healthcare providers with adherence to diabetes self-care management education regimens and other related preventive care programs are directly correlated to aligning strategies for effective therapeutic relationships and addressing behavioral changes within the PPR (Wayne et al. 2017). Effective communication and securing a stable partnership was a very important step toward the development of an effective therapeutic relationship. The basic elements

of knowledge (ongoing learning opportunities), integrity and trust (continuously being open toward the partnership) was very important in the partnership between the patient and healthcare providers. The concept of DSME was significant in the care of T2DM individuals. The patient-physician relationship was important in the care of chronic diseases; therefore, this current study explored how effective relationships could increase adherence to care plans, empowered-building techniques between PPRs, and improved patient outcomes. Bidirectional communication between the PPR and DSME programs ensured all PPR participants was fully informed. The benefits of the DSME program increased the benefits for the T2DM patients; due to the efficiency of communication.

Literature on the Provider-Patient Relationship (PPR)

Communication Skills as a Key Component of the PPR

Communication can be defined as the basic exchange of languages, messages, ideas, and information between individuals. The exchange of language is one of the most fundamental behaviors to humankind (Clark et al. 2017). The systematic process of communication exchange between the patient and the healthcare providers determines much of the quality of healthcare and has a profound effect on the quality of life for patients and their families. There has been increasing evidence through the patient's perceptions, that there was a barrier to healthcare communication, which has led to deficits of health literacy, access to healthcare, health disparities, and poorer health care outcomes (Wayne et al. 2017).

The manner in which a healthcare provider communicates was just as important as the process of communicating medical information to a patient (Wayne et al. 2017). It

was important that the physician and/or healthcare provider communicated clear and concise information so the patient can understand what specific medical information the healthcare provider was trying to express. Patients with a chronic disease such as T2DM, who understood their physician's medical advice usually acknowledged their health problems and adhered to the prescribed medication regimes (Kushner & Mechanick, 2016). This was one of the HBM constructs through perceived benefits, in which the patient-physician worked together to achieve.

According to Gordon and Beresin (2017), research has shown effective communication exchanges between the patient and healthcare providers can improve the patient's long-term health outcomes. One of the challenges of communication between physicians (healthcare providers) and patients was the lack of effective communication exchanges. Ineffective communication exchanges between the patients and physicians (healthcare providers) have led to poorer health outcomes findings (Bruno et al. 2017). Patients that were distressed about T2DM and perceive negative interactions with their physicians usually demonstrated poor compliance and medication adherence (Bruno et al. 2017). The importance of the patient and healthcare providers to work on strengthening their therapeutic relationship at this level of healthcare interactions was extremely important so the partnership could avoid poor interactions.

Personal experiences of T2DM patients when initially diagnosed may have had a significant and long lasting impact on the patient's related behavior, attitudes toward T2DM, and indirectly affect the clinical short and long health outcome challenges for T2DM patients (Polonsky et al. 2017). Several scholars have pointed out the flaws in the

approaches of physician's or sometimes healthcare provider's communication skills and messages onset exchanged with the T2DM patient reflecting the physician attitudes and behaviors displayed are likely to be significant influences to the T2DM patient attitude at the time of diagnoses, as well as the ability and desire to follow diabetes self-care treatment regime recommendations (Polonsky et al. 2017). The perceived empathy received from the healthcare provider directly impacted the relationship of the patient's trust in their partnership. Empathy can be defined as the ability to sense other's emotional impact and the ability to comprehend how one may feel.

Trust was one of the key components in establishing an effective PPR (Beverly et al. 2016). Several studies have explored the key components of therapeutic relationships. A therapeutic relationship required the foundation of empathy, sincerity, congeniality, and altruism to have an effective partnership between the physician-patient (Mitsi et al. 2018). Effective communication was essential in establishing levels of trust in a relationship (Polonsky et al. 2017). In the PPR there are two predominate types of trust: (a) interpersonal trust and (b) social trust. Interpersonal trust can be referred to what occurs between the physician and patient specifically focusing in the areas of patient confidentiality toward the physician, responsibility, competence, and the compassion that the physician directly had for the patient's welfare (Beverly et al. 2016). Trust had to be established within the PPR. Trust was the cornerstone of effective therapeutic relationships between the physician and patient, and patients that have decided to trust their physicians are more likely to follow the prescribed treatment plan (Beverly et al. 2016). The healthcare providers must gain the trust of their patients through their medical

competencies and confidential practices toward the patient's medical information. The exchange of trust was a significant element in a strong PPR (Wayne et al. 2017). Interpersonal trust between the PPRs was developed over time and was strengthened through the therapeutic relationships.

Social trust on the other hand refers to the beliefs emanated through integrity, honesty, and dependability (Wayne et al. 2017). Social trust was strongly influenced by societal constructs (Beverly et al. 2016). Societal construct directly related to societal trust. Personal trust was gained through lived experiences and gained through positive relationships (Wayne et al. 2017). Societal trust was developed through societal interactions and relationships developed with other healthcare providers. The societal trust leads into the development of effective PPRs.

Communication Styles

The communication style used by the physician refers to the specific approach taken when interacting with the patient, including any counseling techniques used. The physician communication styles are significant for developing effective therapeutic relationships between the physician/healthcare providers - patient relationships. According to Kushner and Mechanick (2016), there are four identified models of physician communication styles: (a) paternalistic communication style, which the physician represents the promotion of a guardian figure for the patient, articulating and guiding what medical interventions are best suited for the care of the patient; (b) informative communication style, which this physician was the champion of medical expertise, so the physician allows the patient the opportunity to be exposed to many

different treatment medical interventions; (c) interpretive communication style, which the physician was identified as the counselor and allowed the patient to venture in a joint relationship, allowing both to gain information and establish a deep understanding of the medical findings together; and (d) deliberative communication style, which this physician related to the patient as a teacher figure or a friend, guiding the patient in a dialogue to allowing the best medical intervention decision to be selected (Peyrot, 2015). The identification of the most appropriate communication style for the physician-patient relationship directly correlated to developing effective therapeutic relationship between the physician-patient relationships. Table 2 presents information regarding physician-patient relationship models.

Table 1

Physician-Patient Relationship Model

	Paternalistic Relationship	Informative Relationship	Interpretative Relationship	Deliberative Relationship
Patient Values	Patient is objective and information is shared by physician and patient	Fixed and known to the patient.	Not fully formed – conflicting at times.	Open to moral discussion and developing one-self.
Physician's Obligation	Promoting the individuals well-being-regardless of the individuals current status	Assisting in the presentation of factual information and focusing on specific interventions.	Interpreting the patient relevant values and directing him toward specific interventions.	Assisting the patient to use their most values and initiate their selected interventions
Patients Autonomy	To approve objective values	Control over medical care.	The ability to have self-understanding toward medical care.	Moral self-development to medical care.
Physician's role	The role of guardian is assumed	Technical Expert	Counselor	Instructor or Friend

It was important that the physician identified what specific communication style was used to effectively converse and develop a strong bond with the patient. The lack of a physician developing effective communication techniques lead to ineffective communication exchanges for the patient (Kushner & Mechanick, 2016). Better communication skills exchanged within the PPR, increased patient self-confidence, promoted prevention errors, and improved patient compliance (Choudhary & Gupta,

2015). It was always very important to keep the focus of care specifically on patient-centered interventions and worked toward effective communication tools to attain therapeutic relationships in the clinical settings.

Effective physician and patient communication strategies was supported when patients and healthcare providers shared the same goals continuous care, mutual understanding of each respective role, and associated tasks, and formed bonds characterized by the development of strong confidence and trust levels (Wayne et al. 2017). The foundation of the therapeutic relationship was started during the first meeting or medical appointment with the healthcare professional. The tone of the words exchanged in the PPR promoted effective communication and assisted in building a meaningful and trustworthy relationship (Kushner & Mechanick, 2016), but coming to shared goals and knowledge, mutual understanding, trust and confidence likely takes skill, experience, and time.

Literature on the Role of the PPR in Health Outcomes

Challenges to Improving PPRs

Physician-patient relationship can have profound positive and negative implications on clinical care. Collectively and individually, many physicians are slowly losing ground in their capacity to form meaningful therapeutic relationships with patients, who are essential for an excellent patient experience and for the quality of care (Yagar, 2019). Finney Rutten et al. (2016), indicated that communication challenges that existed between physicians and patients can be categorized into smaller subgroups, which can directly impact the physician's relationship, through their skills and challenges that

directly focus through the healthcare system which can include: (a) insufficient quality of time invested for listening to patient–healthcare providers concerns - should practice reflective listening; (b) lack of the healthcare providers understanding the concerns of the patient-healthcare provider situations– should be recognized and responsive to the patient's emotions (skills); (c) inability to provide access to health resources to assist patients regularly in community resources and knowledgeable of T2DM health policies (healthcare systems) – this directly impacted one of the key elements of knowledgeable healthcare providers; (d) the ability of the physicians to relay pertinent medical information appropriately so cognitive levels of understanding could be achieved (skills) by the patient; (e) showing gratitude and appreciation on a regular basis to build and solidify long-lasting relationships with the patients (skills) – attaining a deeper commitment toward effective therapeutic relationships - this directly impacted one of the key elements of trust between the patient-healthcare provider; (f) lack of communication among healthcare providers and specialists in conversation (such as meaningful relationships with multidisciplinary team members healthcare systems including endocrinologists, cardiologists, ophthalmologists, general practitioners, and nephrologists) (Stuckey et al. 2015); and (g) the association of communication was the lack of effective communication exchanges; therefore, there was a hindrance of improved patient health outcomes for the T2DM patient (Kushner & Mechanick, 2016). It was important to remember, as the patient-healthcare provider relationship became more significant, it was essential to understand the influential factors toward the relationship.

Caring for patients that have been diagnosed with several chronic conditions such as T2DM required effective communication skills and positive interactions from their physicians and healthcare providers. Tailored communication skills and positive interactions also needed to be extended with the patient's caregivers and family members (Finney Rutten et al. 2016). The positive interactions of healthcare professionals can also be known as care coordination. Finney Rutten et al. (2016) demonstrated that care coordination was designed to improve communication interactions and promoted giving information to reach the patients, caregivers and healthcare professionals. HBM constructs also could promote changed behaviors between the patient-healthcare relationships. In the 21st century, the demands of a physician's daily work tasks and lack of communication skills to address the physicians' stressors lead to increased challenges and deteriorated the existing PPR.

The importance of the role between the physician-patient communication skills set was one of the most fundamental steps in patient care; therefore, effective, clear, and respectful relationships produced therapeutic effects for the patient (Kushner & Mechanick, 2016). Physician-patient communication was a critical step toward the care of chronic diseases such as T2DM. Establishing a good working PPR and implementation of effective health intervention strategies assisted in improving long-term medication adherence in T2DM patients. Physician- patient outcomes improved through effective communication skills (Kushner & Mechanick, 2016). It was significant that the method-of-choice that the physician and/or healthcare professional communicating medical information to the receiving individual was as important as the actual information being

communicated (Kushner & Mechanick, 2016). When the healthcare professional worked toward bridging the gaps with the T2DM patient concerning effective communication - the therapeutic relationship was the basis of working together, then this process further promoted health issues.

According to Kurtz et al. (2016), over the past 2 decades there has been an increased political and medical pressures to improve the communication skills and training for physicians through the national level of The Institute of Medicine and International Association of Medical Colleges. The ability of the physician to fluently be able to communicate with their patients has been a slow process. Although, the establishment of clinical communication programs has been adopted for the physicians in their educational curriculum, the classes have not always been taught as effectively as possible (Kurtz et al. 2016). Major emphasis has been placed on the educational curriculum to increase early in medical training, as well as on the physician levels to improve communication skills.

Patients that understand their physician's medical guidance are more likely to accept their health problems. As the patient understands the offered treatment modalities recommended by the healthcare providers, then the patient began to change their behaviors to adjust to the acceptance of the diagnosed disease process, and began to adhere to their treatment and medication regimes (Kushner & Mechanick, 2016). Behavior changes by the patients goes through several acceptance phases, as in the HBM. Upon the acceptance of these new adopted behaviors by the patients and a deeper

understanding of their physician medical guidance, the exchange of a stronger therapeutic relationship was established. The PPR relationship also began to strengthen.

In the current academic curriculum, according to Kurtz et al. (2016), there are four essential components that encompasses basic clinical competencies for physicians which can be translated to good clinical practice that includes: (a) knowledge base (reflective on the knowledge gained through higher education); (b) effective communication skills (the ability to effectively communicate with another individual with comprehension), (c) the ability to perform physical examinations (the ability to perform anatomical examinations proficiently on the participating individual); and (d) the promotion of problem solving strategies (the ability to assess a situation and analytically solve the situation that has been identified). The perspective medical students at this point in their academic curriculums are either classified as medical students, residents, or fellows. The individuals need to be able to master each level of their clinical competencies to be able to gain the much needed characteristics for an effective physician.

There is a lack of evidence through research that these essential clinical practices were being mastered by the physician/healthcare professionals; therefore, contributing communication barriers toward the advancement of the patient's care relationship can present themselves as concern barriers for PPR. Communication was a core clinical skill for physicians and healthcare professionals. Effective communication between the patient and physician partnership at the time of T2DM diagnosis, with individual understanding and engagement for T2DM medical regimen over time lead toward improved health care

outcomes. The challenges that continue to exist are the impact and significance of the dialogue between the physician and patient at the point of initially being diagnosed and in the months and years after being diagnosed (Polonsky et al. 2017). Finney Rutten et al. (2016) demonstrated there was observed associations between positive patient-centered communication relationships, improved T2DM self-efficacies, and patient outcomes with chronic disease illnesses, such as T2DM. The ability to care for chronic conditions in patients with T2DM conditions required effective communication skills and special coordination between the medical team personnel and patients. Literature on Training Models for Effective PPRs.

Medical Training for Effective PPR

Many professional organizations mandated and defined key elements of communication skills that should be academically mastered through the use of effectively listening, effective questioning skills through eliciting information from the patient, the use of effective explanatory skills, educating the patients, the ability to counsel the patient, and the ability to make informed decision, based on critical information and preferences. United States educational programs have incorporated through mainstream curriculums specialized didactics, such as communication skills sets for physicians and other related healthcare professionals. Certified communication summative assessments have become an integral part of associate, bachelor, and graduate programs (including residency training programs) for health academia in the United States (Kurtz et al. 2016). Effective communication between the physician and the patient was a basic clinical skill. Communication skills should be taught with the same strict rigor as other medical

sciences to all related healthcare professions (Kurtz et al. 2016). According to Kurtz et al. (2016), there are three broad communication categories, which are integrated into the academic curriculum to produce effective communication skills for medical training programs. This literature review revealed that there was a lack of evidence that effective communication skills are being mastered in higher education programs for medical professionals (Kurtz et al. 2016). The three basic communication skills are content, process, and perceptual which are impossible to separate and cannot exist without each other. The basic definition of the essential communication categories can be categorized into subtitles:

Content Skills

Content skill categories take into account the type of questions asked from the healthcare professional, the type of information gathering and collection process, and the developed treatment plan discussed with the physician–patient (Kurtz et al. 2016). The content skill was emphasized by the types of questions that are communicated to the patient and what information is obtained from the patient. The healthcare professional must clearly deliver questions that will gather specific health information that was needed from the patient and together develop a clear treatment that the patient will be able to understand and clearly follow. It is important that the patient and healthcare partner work closely together to achieve their goals.

Process Skills

Process skill categories take into account the types of skills used to communicate between the physician and patient interactions. The process skill set was used to

communicate with the patient to get specific gathered information such as: (a) past medical history, (b) information that is provided through the communicative interactions, (c) the developing relationship of the healthcare providers with the patient, and (d)the use of verbal versus non-verbal communication skills and the actual thought process of how implementing a structurally sound and organized delivery of communication was given directly to the patient (Kurtz et al. 2016). The physician and healthcare professionals must be able to effectively utilize the process skills to communicate and understand the basic needs and comprehensive levels for the patient. It is very important that the physician clearly understands and knows how to obtain the needed information from the patient and assure the best health outcomes for the patient. The process skill set was the backbone of developing the treatment plan for the patient. The process skill level was one of the integral steps that assist in identifying the most appropriate DSME program for the patient. The healthcare providers must also be able to identify the perceived barrier of the patient and assist them in transitioning through this construct.

Perceptual Skills

Perceptual skill categories take into account what the physician and/or healthcare professionals are thinking and feeling as they interact with the patient. Perceptual skills allow medical professionals to explore their own inner decisions leading them to make informative clinical decisions, problem solving ideations, integrity, respect for the patient and other medical professionals, and reflecting on the behavioral attitudes of the communicator (Kurtz et al. 2016). Perceptual skills allow insight for compassion that the medical provider has for the patient, and the disease process of T2DM and allowed the

healthcare professional the ability to be challenged with the sensitivity of one's own biases and awareness of their own self concepts (Kurtz et al. 2016). The perceptual skill set was a very important category to align with the patients' perceived behaviors of their medical care. The PPR must work very closely to attain a unique alignment and shared values to implement the best pathway for informed decisions.

Upon researching, the significance of patient-centered communications exchanges, there have been six conceptualized functions identified: (a) cultivate and encourage the fostering of healing relationships, by developing trust and understanding the thought processes of others involved; (b) the ability to exchange information, while proving the ability to be sensitive to the patients' culture, literacy, and information needs; responding to the needs of one's emotions, by demonstrating methods of support through individual reactions during treatments, high and low within the chronic disease process and supporting their care givers and/or family members; (c) managing disease uncertainty, regarding the efficacies of the treatment and prognosis state; (d) engaging the patients in making informed decisions; and (e) allowing the individual the ability to identify diabetes based community resources, understanding the healthcare matrixes, and the identification of applying patient autonomy (Finney Rutten et al. 2016). Patient-centered communication functions have been identified and address pathways to achieve communication alignment between PPRs.

In the PPR, the ability to gain high levels of trust has led to increased physician and patient communication, improved adherence to the treatment regime, and improved the over-all quality of gaining effective therapeutic PPR (Beverly et al., 2016). There is a

deficit in the educational curriculum for communication skills taught on higher levels of education for healthcare providers. The need to increase this significant communication skill set was provided to increase interchanging of achieving effective therapeutic PPRs.

Medical Linguistics Skills

Medical linguistics is a medical language used primarily by medical experts in their related professional fields for communication exchanges. Medical linguistics incorporates more than 2,600 years of a development influenced primarily by Greek and Latin medical traditions (Jones, 2020). Acquiring medical language bridges the gap between the two somewhat disparate fields of study that make up medical terminology: medicine and languages. Instructors with medical backgrounds want their students to learn to speak the language of medicine but are unfamiliar themselves about the origin and meaning of the roots. They teach what they know, which was the core of medicine, turning the course into an extended memorization process, which fails to equip the student with the ability to decipher the meanings of medical terms. Instructors with language backgrounds have limited knowledge of the medical field, so they too teach what they know – word origins and roots – but avoid focusing on the medical application because it is outside their field of expertise. Acquiring the art of learning medical linguistics bridges the gap between the two different fields of study that makes up the art of medical terminology: (1) medicine and (2) languages. Instructors with medical backgrounds want their students to master the ability to speak the language of medicine however they may be unfamiliar themselves regarding the etiology of the Greek and Latin medical roots. They teach the students medicine, turning the course into an in depth

memorization process, which could fail to educate the student with the ability to decipher the root meanings of medical terminologies. Instructors with limited language backgrounds pertaining to the medical field, teach what they know – word origins and roots. This learning process can lead to the students' inability to learn the medical application because it is outside their field of expertise (Jones, 2020). This learning process could lead to communication weaknesses for achieving effective PPRs exchanges.

Summary

In this chapter, the researcher described the literature on PPRs and the gap in the literature involving the management of T2DM. The researcher reviewed literature on the theoretical framework, the HBM, and the conceptual foundation of DSME. The literature research on the PPR identifies communication barriers that exist between patients and healthcare providers, which can lead to knowledge deficits that hinder improved health outcome results (Beverly et al. 2016). Developing trust, knowledge, and integrity are fundamental steps in improving the PPR while empathy and integrity are needed to develop therapeutic relationships. There is a direct correlation between evidence-based knowledge that promoted improved PPRs and improved health care outcome results in T2DM patients (Yagar, 2019). It was important that the healthcare providers strived to implement effective therapeutic relationships in the clinical setting. The communication that occurs within a patient-provider was significant because rapport was developed and trust can be established.

Effective healthcare provider training in this area is critical, but communication skills training in higher education for health care providers is rare (Finney Rutten et al., 2016). To determine the best strategies to improve self-care communication exchanges between PPRs, the knowledge gained and practical skills of communication acquired throughout their higher education experiences will prepare the physicians for developing skills of trust, knowledge, and loyalty. Through this medical partnership with the PPR, the key elements of trust, knowledge, and loyalty impacted the patient's outcomes and promoted an effective PPR (Chipidza et al. 2015). The goal of a patient's healthcare provider should be to strive for an effective therapeutic relationship. Chapter 3 will be an explanation of qualitative methods used to examine the perceptions of patients and healthcare providers in the management of T2DM. Chapter 3 provided a more in-depth examination of the qualitative methodology that was used to collect and analyze data from the outlined sample of population.

Chapter 3: Research Method

Purpose of Study

The purpose of this phenomenological qualitative research study was to better understand the challenges faced between healthcare providers and T2DM patients within the clinical settings for diabetes self-management. According to Yaceet al. (2018), more research was needed for areas such as the T2DM clinical settings in healthcare system levels between T2DM PPRs. It was necessary to examine PPR challenges in T2DM management education programs. Though many contributing factors could be recognized regarding PPRs, change was still not happening. I developed the research questions in this study to explore the experiences of healthcare providers and patients. I used the HBM and the DSME to explore how and why healthcare providers' behavior seemed to be changing so slowly. Additional strategies for developing the qualities of trust, loyalty, and empathy were needed to address development of effective therapeutic relationships between healthcare providers and patients and identified challenges that are faced in this partnership.

The major sections of Chapter 3 are (a) research design and rationale. (b) role of the researcher, (c) methodology, (d) instrumentation, (e) recruitment and data collection (f) data analysis plan, and ethical procedures.

Research Design and Rationale

The research design and rationale for this qualitative study used these particular research questions to determine the perceived PPR relationships in the management of T2DM.

Research Questions

Research Question 1 (RQ1): What are the perceptions of patients (ages 24-75) with Type 2 diabetes mellitus (T2DM) regarding their therapeutic relationship with healthcare providers as it relates to the constructs of the health belief model, and the DSME standards?

Research Question 2 (RQ2): What are the perceptions of healthcare providers with Type 2 diabetes (T2DM) patients regarding their therapeutic relationship with patients as it relates to the constructs of the health belief model, and the Diabetes Self-Management Education standards?

Research Question 3 (RQ3): What are the recommendations of T2DM patients and healthcare providers on how to address any challenges in their patient-physician relationship, as they relate to the constructs of the health belief model?

In this chapter, I explain how I collected and analyzed the data using a qualitative design and a phenomenological approach. I explored the perceptions of effective therapeutic PPRs in the management of T2DM. According to Leung (2015), qualitative research can be defined as a systematic collection and interpretation of collected material which has been obtained through techniques such as in-depth interviews, conversations, and observations within a natural setting. My in-depth interviews consisted of semistructured, open-ended questions pertaining to understanding an effective relationship between the healthcare providers and patients in the healthcare system level. I used semistructured interviews with open-ended questions to explore evolving themes

from the participants (see Creswell, 2015). I also used additional open-ended questions to gain a more-in depth understanding of the participants' lived experiences (see Creswell, 2015). The participants directly answered their responses into the digital audio recorder. I used a digital audio recorder to give direct attention to the participants and not to lose any pertinent communication offered by the participants. Conducting this study led to positive changes for improving PPRs, in diabetes management by strengthening the partnership strategies was needed for gaining effective therapeutic relationships.

The Role of the Researcher

The role of the researcher in this study was to collect the information and analyze and interpret the data. I conducted interviews and then archived the information from the interviews for the required time. Leung (2015) suggested that the researcher should seek out generalities and uniqueness of the study by carefully and thoughtfully processing the historical background, physical settings, the environment, and other related regulatory factors.

I had not personal or professional relationships with the participants. According to Allen (2017), the researcher can manage unanticipated biases or power relationships by: (a) having the participants who provided the information (data) asking whether the data interpreted seemed to be reflective of the beliefs, (b) reviewing findings with peers (peers often can identify gaps that needed to be addressed or identified things that have been missed), (d) asking clear and concise questions during the in-depth interview, and (d) verifying the study with more data (finding other sources of data than can support the study's interpretation.

Methodology

Participants

I distributed flyers providing information about the purpose of the study, possible benefits and risks of participating, and contact information (See Appendices C and D). The desired participant's geographic locations were from the Harris, Fort Bend, Katy, and Galveston counties of Texas. There was one external participant in Stratford, CT, in Fairfield County. These participants were primarily urban participants. The flyers were distributed and posted in several physician offices, laundromat and grocery bulletin boards. The flyers were also placed in selected American Diabetes Association Resource Centers, and in several church communication boards. The criteria for participation were being aged 24 to 75 years and diagnosed with T2DM. Participants were insulin-dependent or non-insulin diabetics who are under the care of physicians, and/or health care providers, employed or not employed, and have insurance coverage. Other participants included healthcare professionals of the medical community. The healthcare provider's flier stated the inclusion criteria i.e., but not limited only to physicians, healthcare providers, doctor of nurse practitioners (DPN), nurse practitioners (NP), registered nurse (RN), licensed vocational nurses (LVN), nutritionist, psychologist, social workers, dieticians, and diabetic educators. The selection criteria outlined for healthcare providers included that the provider had expertise in the care of T2DM and the healthcare provider participates with insured T2DM patients. Due to the time restraints for the recruitment of healthcare providers, I set up designated office visits via appointments or mini Zoom meetings. All ethnic groups were included. Exclusion criteria included any

participant under the age of 24 or over 75 years of age. There was no age restraint placed upon the healthcare providers. Individuals that had not been diagnosed with T2DM were excluded from the research study.

All ethnic groups were able to participate in the study. Participants included T2DM patients, physicians, and other related healthcare professionals in the metropolitan Houston area. The potential participants were recruited through flier distributions and postings in physician offices, grocery stores, laundromats, American Diabetes Association Resource Centers, and in several churches. Upon completion of the interview process, the participant received a $25-dollar Visa Gift Card.

The participants that had met the study's criteria were notified by four methods of communication: a survey link that I provided directly to the participants, email, and via face-to-face communication, or by telephone. Prior to meeting the participants for the research study, they were contacted via telephone or by their desired method of communication for screening purposes. If the participant was unable to participate face-to-face, then either conference interview calls or video conference interview meetings was set up. The informed consent form was hand delivered, emailed, or mailed to each potential candidate who was provided an opportunity to review the consent form and give time to ensure that the potential participants had a question and answer period. There was a total combination of six T2DM patients and four healthcare providers.

Confidentiality is very important in research to maintain the privacy of the participants; therefore, I used identifier codes which only I and my participants knew. It

was important to conceal the study setting and other-related identifying information to further protect the participants' rights.

Sampling Strategies

There are several different purposeful sampling strategies widely used in qualitative studies. According to Creswell and Poth (2017), sample sizes in qualitative research are often smaller than those used in quantitative research studies because qualitative methods are focused on gaining an in-depth understanding of phenomena, rather than simply gathering and analytically analyzing data. I used a purposeful sampling strategy in this study. Purposeful sampling is a widely used technique in qualitative research. Purposeful sampling is used to identify deliberately chosen participants or selected sites which can best aid the researcher with understanding the problem and exploring the participants through the research questions (Creswell, 2015). I used purposeful sampling to select the participants who had the prerequisite lived experiences to address the study interview questions. I also used the snowball sampling technique. Snowball sampling is a commonly employed sampling method used in medical science and in various social sciences (Kirchherr & Charles, 2018). Snowball sampling can be defined as the technique in which one participant gives the researcher the name of at least one more perspective interviewee. The next interviewee, in turn, provides another name of a perspective interviewee, and so on, which enhanced the sample growing like a rolling snowball (Kirchherr & Charles, 2018).

Qualitative methods rely on precedents for the determination of the quantity of participants based on the specific type of analysis proposed such as 10 participants' in-

depth interviews-multiple times in phenomenological studies and emphasis of homogeneity which requires smaller sample groups (Fusch & Ness, 2015). The targeted number of participants involved in this study was a total of six T2DM patients and four healthcare providers. As the qualitative inquiries were obtained, information was gained about the T2DM patient or physician and/or healthcare professional in-depth, one-on-one interviews content, this information lead to data saturations. As Palinkas et al. (2015) observed, qualitative methods place the primary emphasis on saturation. A number of factors can affect the sample size used in research for a qualitative study. Data saturation transpires when the study has reached its maximum participants and the end result of additional perspectives or information obtained had reached the point of saturation (Palinkas et al. 2015). In the use of qualitative research methods, the researcher is aware of precedents for determining sample size, depending on the type of analysis proposed (Palinkas et al. 2015).

Informed Consent and Confidentiality Adherence

The informed consent form was written clearly and in simple language that the participants can easily understand. The participants were provided with the informed consent document, approved by Walden University. The consent form was given to the participant, prior to the start of the in-depth interview process to assure there was ample time to review the document. The consent form included specific details to ensure the transparency of information that was relevant to the study. The informed consent form was clearly understandable, permitting participants to make an informed and voluntary decision to continue or withdraw from the study (U.S. Department of Health and Human

Services, 2020). The amount of information given to the participants varied depending on the risks or complexities involved in the research study. All the participants consented to participate with an audio-recorded device, and the information they provided was kept confidential. Confidentiality laws such as the Health Insurance Portability and Accountability Act (HIPAA) protects communication exchanges within the PPR pertaining to the protection of personal health information, if any patient information was exchanged from the healthcare provider throughout the in-depth interview session with the researcher (U.S. Department of Health and Human Services, 2020). There was no information obtained from the participant's direct physicians. The informed consent form was a significant tool used between the researcher and potential participants throughout the entire process of the research study. The informed consent form was an ongoing educational interaction between the researcher and the participant.

Instrumentation Management

The instrument of choice for this qualitative study was through the in-depth interview process. The data collection instruments that was used was through the interview protocol and the use of the audio-tape recording device. The interview involved intensive individual interviews with a small number of respondents to explore their ideas, or situations. The researcher interviewed the participants with 22 semistructured open-ended questions to T2DM participants and 20 semistructured open-ended questions to the healthcare providers. The questions that were used were clear and unambiguous sentences to facilitate easy understanding. Cridland et al. (2015) stated that the use of semistructured interview processes was one of the most common types of

qualitative strategies that researchers can adjust to satisfy the needs of the various interviewees. The external use of a digital audio tape recorder was used to record the in-depth interview process. The continuous needs of the researcher need to assess, evaluate, and to monitor the instrument during the individual in-depth interview process was essential to ensure there was accurate recordings of the participant's responses (Allen, 2017). It was very important that the individuals were willing to participate and had the abilities to communicate their experiences and opinions in a reflective manner (Palinkas et al. 2015). The in-depth, one-on one interview process continued until a sufficient amount of data collection had been collected or the saturation point had been achieved.

Procedures for Recruitment, Participation and Data Collection

Data collection is an important part of any type of research study and the use of qualitative data collection involved the delicate balance of direct interaction with the participants either via one-on-one or direct interaction with a group of individuals who are involved with the study. Before the data was collected, the permission to conduct this research study was granted from the Walden University's Investigational Review Board (IRB). Once IRB approval had been granted, then the recruitment of the participants began by distributing and posting fliers in physician offices, grocery store bulletin boards, American Diabetes Association Resource Centers, laundromat communication areas, and several churches communication boards. Each potential participant reviewed the consent form and if willing to continue to participate in the study signed the informed consent document, and the participant's identifier code was given for PHI confidentiality. A verbal explanation of the study was given to ensure that the participants understood what

they had signed, to provide the purpose of the study, to facilitate a discussion of the minimal risks involved, and an explanation of the procedure to withdraw from the study at any given time.

The participants agreed upon the use of a digital audio tape recorder while the individual interviews with the researcher was conducted. The audio taped interviews was conducted with all the participants. The collection of data for qualitative studies was in a natural setting or a comfortable environment to navigate contrived results that could be interpreted out of context by the participants (Deterding & Waters, 2018). These contrived results could be caused if the participants felt that they were not in the natural setting they were comfortable in. The interviews were conducted in multi-purpose rooms located either in a medical professional office or in the library setting. The participants were given the opportunity to pick either setting. The participants were assured that the data collected through the interview process were assigned a participant's identifier code for their privacy and protection. The data was collected from the participants.

Before the in-depth interview process with the participants began, each participant completed a brief demographic form that gathers information regarding the participants' age, gender, race, ethnicity, length of time diagnosed with T2DM, level of education, and experiences shared with their healthcare professions. If the participant was a healthcare professional, the demographic form will gather information regarding the title of healthcare professional, background information, specialty, gender, race, ethnicity and years of experience, level of healthcare education and the role the healthcare provider offered to the T2DM individual.

The use of semistructured, open ended questions - in-depth one-on-one interviews was used for data collection. Structured interviews were based on questionnaires given in the same sequential order, and asked the same way to each participant (Deterding & Waters, 2018). The use of semistructured interview techniques allowed the researcher to probe deeper into the participant's life experiences (Statistic Solutions, 2017). If needed, follow up questions was asked to develop and intensify the responses. The data was collected from the T2DM and healthcare participants selected for the study. The data was collected by the researcher, during the in-depth interview process. An MP3 player or digital audio player was used to interview the participants and recorded the required data. The participants were asked to speak clear and concise into the recorder or digital audio player microphone. This type of portable digital audible player allows easy transferring of the participant's information onto computer files. The interview sessions lasted approximately 1 hour. The interview was recorded throughout the session with the permission of the participants. The main interview questions were open-ended with subsequent semistructured questions following the participants' responses as needed. During the in-depth interview process, if more information was needed from the participant, the researcher proceeded with interviewing techniques which enabled probing and prompts to ask more questions to get additional information. There was an alternative participant list developed with 4 additional participant's name and contact information. These perspective participants would be notified only in the event that there aren't sufficient candidates to complete the study.

I kept a journal during the interview process to assist in capturing possible themes and main points shared by the participants. The notes were used to track similarities and differences in the way that participants may respond to probing questions. As suggested by Palinkas et al. (2015), probing keys such as continuation, elaboration, and clarification were used throughout the interview process, to allow more information to be drawn out and confirm in-depth interpretations. According to Antwi and Hamza (2015), researchers encouraged the participants to speak freely regarding their phenomenon which they have experienced. Within 24 hours of each interview, the audio recording and audit trail log was transferred to the designated computer file. According to Palinkas et al. (2015), transcription should occur quickly in the event that a malfunction with the recording device or misinterpretation of the written information transcribed was delayed. The data collection time allotment was continued with the interviewing process until the saturation point had been reached.

United States postage mail or specified communication links was sent to each participant within 48 hours of transcription requesting the participants to authenticate the correctness of their transcript. This was only used if there was a problem or question of the data received. The participant's transcription also included a section to notify the researcher if any inaccurate data was found within five working days of receiving their transcript. Corrections would be made and the updated transcript would be sent back to the participant within 48 hours for their approval. The corrections would continue to the participants until they authenticate the correctness of the transcript. The time allotment for this correction phase will be no greater than 3 weeks of time. This process was not

used for this study. The data collected through transcription and audio tape will be secured and safely stored for the recommended time period of 5 years, as recommended by Walden University. Each participant's computer file will contain individual audio recordings, the transcribed interview data (inclusive of corrected data submitted by the participant), and audit trail records from the interview process. After the interview process, the participants had another opportunity to have any questions or concerns answered. The participants at this time were escorted out of the facility of choice. After the interview process had been completed, the participants received their $25-dollar Visa Gift Card. After the interview-transcription process was completed with each participant, the individuals received a letter of appreciation, reassurance of their information being kept confidential, and would receive a two page finding of the final dissertation summarization. This process will be completed after the final dissertation approval from Walden University. There will be consideration made to accommodate the participant's interview process with either face-to-face interview or non-face-to-face interview or "Zoom"; due to the coronavirus -19 pandemic.

Face to Face Interviews with Personal Protective Equipment

Coronavirus was a major healthcare crisis that had affected the entire community (CDC, 2020). Measures were used during the interview process to assure public health safety practices reach all participants of this study, during and after the Covid-19 Pandemic. According to the CDC (2020), the reduction of exposure to Coronavirus was done in between each participant's interview by cleaning and disinfecting the interview area surface spaces, microphones, and any adaptive equipment that was used during the

interview. The CDC (2020) guidelines was enforced by the researcher and study participant wearing their masks and gloves (a) that the cleaning product was an approved disinfectant by the Environmental Protective Agency (EPA); (b) assured that the proper personal protective equipment (PPE) was used, prior to disinfecting the area (masks, disposable gown, and gloves);(c) pre-washing hands with soap and water then proceed to place disposable gloves on; (d) followed the product's directions and check the surface type to assure effectiveness; (e) pre-cleaning any surfaces with soap and water, if the directions mention the surfaces must be pre-cleaned or if the surface had visible dirt, (f) using the appropriate contact time to ensure the productive was effective, and (g) discarding the disposable gloves after cleaning the area, then washing your hands with soap and water for the recommended time period and securely locked up the disinfectant.

Alternative Method for Non-Face to Face Interviews by Video Telephony Services (Zoom)

The alternative method for non-face-to-face interviewing was done by video telephony services or "Zoom". Zoom offers simple online meeting connections and cloud video conferencing into one easy-to-use communication platform. Zoom can be installed free by using the Zoom app. The participants needed to have access to either: (a) laptop computer, desktop computer, or mobile operating systems (Androids or iOs systems). The participant also must have had access to audible communication on the receiving device. The basic instruction is given to the participant prior to the non-face-to-face interview: (a) the participant received a Zoom invitation, (b) signed into the Zoom meeting by enabling the video, (c) used the personal meeting ID (PMI), (d) used the

designated password, and (e) the Zoom meeting. If this was the first time a Zoom meeting had been used from their device - the participant was asked to allow Zoom permission to access the camera & computer.

Data Analysis Plan

The data analysis phase involved several steps, which required continual reflection while answering analytical questions, compiling data, making interpretations, and writing reports. Once the interview processing phase was completed, the modified Van Kaam approach was implemented. There were multiple strategies that were required when the phase of data analysis was implemented, such as transcribing, organizing and preparing, interpreting the meaning of emergent themes, interrelating the themes, expanding on ideas, coding manually and through coding software used in NVivo and formulating a final synthesis (Rubin & Rubin, 2005). The major data analysis plan was the Modified Van Kaam approach, which has been popularized by the Moustakas methodical approach (Alase, 2017; Statistic Solutions, 2017). Each interview was treated as its own data set. Sections 1–6 will obtain data directly from the individual one-on-one in-depth interview process, and section 7–8 was derived from composites.

The following process steps were implemented and used as a guide with each in-depth - one-on-one interview process. First is the inclusion of horizonalization, which treated all the data equally that was submitted in the studies, by each participant. This was the phase of preliminary coding and grouping of listing every quote relevant to the experience under the investigation, by the participants. There are no quotes or excerpts that are left out. Second, the reduction and elimination phase of assessment was when you take every

quote listed transcribed from the participant and reflect with two specific questions (a) was this quote important submission to the lived experience from the participants? and (b) was this quote reduced to its dormant meaning? If the questions are answered by saying no, then the quote is eliminated. This assists the researcher with separating the invariant constituents of the experience from redundant and ancillary information. Third, thematizing the invariant constituents involves taking the excerpts and quotations that have passed the two question test by beginning to explore the dormant meanings and group excerpts based on the dormant or latent findings. The grouping sub-sections developed into themes that had expressed the experience of the participants. Fourth, checking the themes against the data, which once the data had been developed into the thematic subset, then examine the themes against the dataset obtained. This allows the themes to truly be representative of the participant's experience and tell the participant's story. Fifth, creating individual textural descriptions, this with each participant had an individual textural description. These descriptions are representative of utilized verbatim excerpts and actual quoted from the participant. Sixth, creating individual structural descriptions, which individual descriptions were examined through emotional, social, and cultural connections between what the participants say. Primary interpretations of data began to be evolved into play from the individual data sets. Seventh, creating composite textural descriptions, which when the data sets began to develop a table outlining, compiled by the researcher for all developed themes from each participant. Detailed information can be derived through the exploration of themes and patterns. Conceptual frameworks can be developed by the summarization of images through themes and

patterns that slowly emerged through the data. This assisted in the outlining all the themes from each prominent theme across all of the participants' data sets, which was what is the goal to achieve. This description is going to relay what the participants said during their interview process and note the commonality of themes of the lived experiences of the phenomenon. Eighth, creating composite structural descriptions, this is also known as synthesis. This step consists of merging both the textual and structural to give a comprehensive understanding about the phenomenon-at-hand.

The process from Statistical Solutions (2017) was implemented into the data analysis segment for the data collected, once the data had been transcribed. Manual coding and computerized coding gained through the software of NVivo was assisted with organizing and analyzing the data as well as assisted to uncover connections and new findings that was presented in additional insights through these developed transcripts. Both types of coding were used throughout the study. The data analysis processes of the Modified Van Kaam approach, computerized coding of NVivo, and manual coding were used to analyze the data for this study. In summary, the guided theories of the HBM (behavioral changes) and the conceptual frameworks of DSME (the ongoing learning process of diabetes self-management) was delicately entwined through the researchers' understanding of how these themes and patterns were connected with each other. The conceptual concepts will be used to improve PPR and became the researcher's map in investigating this study.

Issues of Trustworthiness

Trustworthiness refers to the level of confidence in the processes that the researcher used to demonstrate rigor during the processes of data collection, data analysis, and results. Trustworthy qualities must be evident and interwoven in the production of reliable studies through credibility, confirmability, dependability, and transferability (Connelly, 2016). The researcher understood the importance of obtaining high-quality data during the interview process to ensure trustworthiness (Creswell, 2015; Patton, 2015). Researchers that are primary data collector instruments in qualitative studies and can introduce biases that might be compromised through the interviewing process, the quality of the collected data, and the trustworthiness of the results (Creswell & Poth, 2017). The researcher had developed alternative strategies to avoid introducing or eliminating biases into the study. Allowing this delivered process of high-quality data, the study results demonstrated a continuum of trustworthiness (Patton, 2015). It was very important for the researcher to obtain and maintain high-quality data through the interviewing process.

Validity can also be referred to the credibility and accuracy of the research study. Validity refers to the truthfulness and applied applications of methods used by researchers and demonstrated how the results of the study can be reproduced (Noble & Smith, 2015). Research studies are valid only if the researchers are truly addressing the problems in which they initially set forth to investigate (Patton, 2015). Validity was recognized as one of the most significant considerations in research and it can be subdivided into internal and external components (Creswell, 2015). Kern (2018) stated

that triangulation increases the assurance of the validity and assists in understanding the researchers studied phenomenon, which assures the validity of the study. The interaction between the internal and external validities was important because it directly assisted in analyzing the data. Special attention was considered with internal validity, in order to control variables that impacted or reduced the generalizability of the end results.

To maintain the reliability of a study, Patton (2015) suggested the use of reflexivity and bracketing which was implemented to prevent personal biases from compromising the data. Other techniques such as triangulation of multiple sources including audio-recordings of the interview responses, field notes, and observation of the participants, respondent validation, and clear detailed methods of data collection and analysis, assisted in the validation of study results (Kern, 2018). The researcher administered semistructured, open ended questions to the participants through the use of in-depth one-on-one interviews. Personal biases were eliminated by using the triangulation techniques through the use of audio-recording of the interview responses, field notes, and direct observation of the participants should be obtained. To ensure the true transparency of the results, the researcher's field notes and the digital audio-recording of the participants to the interview questions were used. The transcriptions were transcribed verbatim for interpretation. Transferability was established by providing findings applicable to evidence of the participant's life experiences or situations.

Dependability and Confirmability

A study can be found to be reliable when the findings can be reproduced. Qualitative studies are directly impacted by the meanings that are assigned by an

individual's experiences; therefore, the concept of reliability can be problematic (Patton, 2015). However, the researcher considered the concepts of dependability to see if the findings were logically based on the information assembled through the study.

The concepts of confirmability are processes in which the readers can strategically disseminate through the study's data and formulate summations on how the outcomes may be obtained or potential assumptions were derived (Creswell and Poth, 2017). One of the tools used in qualitative studies was the audit trail. Audit trails involved establishing the findings of the participants' responses versus the responses of the researcher's own biases and perceived perceptions (Statistic Solutions, 2017). The audit trails were qualitative strategies established pathway for confirmability. The use of an audit trail was maintained throughout the entire study process tracking information such as underlying principles identified by the researcher for any variations, which occurred throughout the study, research decisions, and any directions that was taken during the advancement of the study. Audit trails documented the blueprint of development for the completed analysis. According to Connelly (2016), there are six essential categories that must be included in the performance of audit trails which involves: (a) raw data, (b) data reduction and notes regarding the analysis processes, (c) data reconstruction and synthesis, (d) any process notes, (e) any resources or materials related to intentions or dispositions, and (f) preliminary developments. Dependability occurred when the researcher established an audit trail to document research notes about all the activities which occurred during the study to review the data captured during this in-depth interview process of this study.

The researcher achieved dependability by using techniques such as triangulation to ensure there was trustworthiness (Morse, 2015). Data obtained through the process of audit trails was securely locked up with other identified privacy information of the participants.

Ethical Procedures

The success of this study strongly relied on it being conducted in an ethical manner. One of the major functions of the Institutional Review Board (IRB) was to ensure that the proposed research conforms to the ethical standards and regulations, as well as United States federal regulations. The Walden University's Institutional Review Board conducted a concise analysis of the ethical procedures that were submitted prior to the data collection being performed. Approval from Walden University's IRB was required prior to selecting the participants, collecting data, analyzing the obtained data's information, and any pivot data (Walden University Research Center, 2020). Walden University IRB gave the researcher the approval documents and relevant approval IRB numbers prior to the start of data collecting process. The approval IRB number given: 7-11-22-0130363. The wellbeing and privacy of the research participants was of the utmost concern, safety measures such as the understanding and completion of the informed consent forms, authorizations and awareness to audiotape and transcribed data received from the participants are incorporated and address by the standards of intervention of Walden University's IRB. The treatment of ethical values was upheld for the human participants of beneficence (doing well), maleficence (preventing harm to the participant), trust and fidelity (between the research investigator and participant),

confidentiality of personal information, preserving personal dignity for the participant, recruitment process, autonomy for voluntary and informed decisions (Walden University Research Center, 2020). These ethical values were upheld through the entire research study.

The informed consent forms were given to the participants by the researcher, prior to the start of their interview process. The participants were given time to review the consent forms and address any pertinent concerns to the researcher. The participants had the right to refuse to participate and withdraw at any given time from this research study, without any retaliation or consequences. Electronic files of the participants' data were maintained through a password protected personal computer, coded with individual identifiers per participant, and any hand written files used for observations or the researcher's journal were securely locked at the researcher's home, for a minimal requirement of 5 years, then it will be destroyed. The personal data will remain confidential. The electronic files of the participants' data will be destroyed on August 30, 2028.

My intent was to gather information through this study to provide a deeper and richer insight, regarding the perceptions of effective therapeutic PPRs among T2DM patients in the healthcare system settings, as well as for contributions toward future research on similar research topics. It is necessary for me to exercise professionalism throughout this entire study. This continued professionalism was done by maintaining adherence to the protocols and established guidelines developed in partnership within the participant's informed consent form (Kass et al. 2015). Every precaution was made to

ensure safeguards to all of the participants' information from any loss or damage. The researcher used precautions such as personalized identification codes, the disclosure of individual names which will not be released to anyone, separations of individual identification codes and consent forms, electronic data was kept under a separate user name & password and the research data was kept in a locked file, under the sole care of the researcher.

Summary

Chapter 3 highlighted the methods that was used to conduct this study, including the role of the researcher, recruitment of the participants, instrumentation, processes for data collection and analysis procedures for trust worthiness. Another facet of Chapter 3 was to explain the significance of confidentiality offered to the perspective participants, through policies such as HIPAA and the safe keeping of the participants' obtained information. The ethical procedures were followed throughout this entire study process with utmost importance to the researcher and ultimately offered peace of mind gained from the participating participants. One of the targeted objectives from this study was to instill a sense of confidentiality and trustworthiness from the participants as they participated in contributing toward this study. The transition of Chapter 4 will continue with the data received through one-on-one in-depth interview processes by obtaining information from the participants' interview data which was gained from T2DM participants, physicians, nurse practitioners, and other related healthcare professionals. A deeper look into the processes of data collection, data analysis, evidence of trustworthiness and results were explored in chapter 4.

Chapter 4: Results

The purpose of this phenomenological qualitative research study was to better understand the challenges faced between healthcare providers and T2DM patients within the clinical settings for diabetes self-management. According to Yace et al. (2018), more research was needed in this area as a basis for alternative strategies in T2DM management education programs. Though there are many factors regarding PPRs, change was still not happening (Yace et al. 2018). I developed research questions to examine the experiences of healthcare providers and patients. I used the HBM and the DSME to explore how and why healthcare providers' behavior seemed to be changing so slowly. Additional strategies for developing the qualities of trust, loyalty, and empathy are needed to address the development of effective therapeutic relationships between healthcare providers and patients.

In this chapter, I discuss my findings through the participation of 10 healthcare providers and T2DM patients. I used 22 semistructured, open-ended questions and a one-on-one interview format to gather data about lived experiences of patients with T2DM and various stressors, such as their shared perceptions of their T2DM medical treatment care from healthcare provider, psychological stressors, and perceived Diabetes Self-Management Education Programs (DSMEP).

In this chapter, I present the findings of this study. This chapter also includes the research questions, demographics of the participants, data collection process, data

analysis process, and themes identified in the study. I developed three research questions for this study:

Research Question 1 (RQ1): What are the perceptions of patients (ages 24-75) with Type 2 diabetes mellitus (T2DM) regarding their therapeutic relationship with healthcare providers as it relates to the constructs of the health belief model, and the DSME standards?

Research Question 2 (RQ2): What are the perceptions of healthcare providers with Type 2 diabetes (T2DM) patients regarding their therapeutic relationship with patients as it relates to the constructs of the health belief model, and the Diabetes Self-Management Education standards?

Research Question 3 (RQ3): What are the recommendations of T2DM patients and healthcare providers on how to address any challenges in their patient-physician relationship, as they relate to the constructs of the health belief model?

Research Setting and Demographics

The samples for this qualitative component consisted of two populations: six T2DM patients and four healthcare provider respondents. Inclusion criteria for T2DM patients were male or female, 24 to 75 years old, diagnosed with T2DM, under the care of a physician or healthcare provider, insulin dependent or non-insulin dependent, employed or unemployed, and covered by medical insurance. Recruitment continued until data saturation was achieved by the point at which no subsequent interviews provided new insights relevant to the research questions.

Inclusion criteria for the physician, healthcare providers: DPN, NP, R.N., L.V.N., social workers, psychologists, dieticians, and diabetic educators, actively treating T2DM individuals in the management of diabetes management, insulin dependent or non-insulin dependent patients, employed or unemployed, and covered by medical insurance.

The research study flyers were posted on bulletin boards throughout laundromats, grocery stores, American Diabetes Resource Centers, churches and health care provider offices located in Houston, Texas. These counties included Galveston County, Harris County, Fort Bend County and Galveston County. Participants that were interested contacted me directly to schedule their face-to-face or Zoom interview process.

Before conducting this study, ethical approval was received from Walden University IRB (07-11-22-0130363). The study procedures were explained, and all participants signed their informed consent documents before their interview commenced.

I conducted this phenomenological qualitative research study in Fort Bend, Waller, Harris, Galveston, and Montgomery. These counties are located in the Gulf Coast region of the state of Texas. There was one in-depth interview conducted in Fairfield County in Connecticut.

Data Collection

I collected primary data were collected from four healthcare providers and six T2DM patients by using the in-depth interview process. The in-depth interview process consisted of 22 questions for T2DM patients and 20 questions for healthcare providers in a semistructured, open-ended question one-on-one interviewing format. The main purpose for using this qualitative tool was to obtain information about how individuals

view, understand, and make sense of their experience in the shared relationship between the healthcare provider and D2TM patient. After receiving the Walden University IRB's approval. I conducted the interviews between the months of July, August, and September, 2022.

The exploratory interviews began with a set of demographic questions. For the healthcare providers, these were: years of experience in the direct/indirect care treatment for T2DM, professional title, years of practice, place of practice location. For the T2DM patients, these questions were: age, diagnosed years of T2DM, years with currents physician/healthcare provider, ethnicity, place of residence.

The primary data collection instrument was the in-depth interview protocols (Appendices A and B), including of 20 semistructured open-ended questions for the healthcare providers and 22 semistructured open-ended questions for the T2DM patients, plus use of the MP3 Philips Voice Tracer audio-tape recording with microphones device and the use of the cell/landline telephone communication system.

I conducted most of the interviews in private study rooms located in the public and medical libraries in metropolitan cities of Houston, Katy, Sugarland, Richmond, and Pasadena, Texas. However, several interviews were conducted via cell/land-line telephones, per request of the requesting participants. Each of the in-depth interview was always started by introducing myself and explaining the nature and purpose of the study. Prior to conducting the in-depth interview process, the T2DM patients or the healthcare providers were asked to read and consent and the informed consent forms were collected prior to the start of the in-depth interview process and the participants were reminded at

any time they could freely withdraw from participating in the research study. After the informed consent forms were collected, each participant, whether T2DM patient or the healthcare provider was individually interviewed. I used the audio-recording to provide accurate data for subsequent transcriptions. The interactive interviews averaged 70 minutes each for the T2DM patients, 60 minutes for the healthcare providers, and none were repeated.

T2DM participant's interviews began with two main questions:

- How well do you think you manage your T2DM?
- Do you feel adequately educated on your T2DM care?

Qualitative probes were used to encourage elaboration, clarification and sequential orders in the narrative feedback given by the participants.

The healthcare provider's interview question began with the question:

- What behavioral challenges if any are you faced with during your patient-healthcare provider relationship in the treatment of T2DM?

This question reflected the T2DM patient's behavior that healthcare provider faced, that was identified as some behavioral barriers, in the treatment care of T2DM. Qualitative probing techniques were used to encourage the healthcare providers to expound upon their responses before proceeding to the next line of interview questions. One of the purposes of probing questions is to assist the researcher on focusing the qualitative interview and to obtain comprehensive data. Once the interview process had been concluded, the researcher recorded reflective and any field notes to enhance the data analysis process.

Every effort was made to keep the T2DM participants time allotment within the 75 minutes as stated through the informed consent guidelines and the healthcare providers within their 60-minute time allotment, so this would not interfere with interrupting the medical work flow of the healthcare provider daily tasks. As each interview was completed, the participants were offered the opportunity to ask any questions, concerns, or recommendations to the researcher. Each participant was immediately compensated for their time with a $25.00 Visa Gift Certificate/Card. Several participants requested that their $25.00 Visa Gift Certificates be donated to their college of choice – focusing on new 2022 freshman students, in their names.

Participants' Characteristics

Characteristics of the T2DM patients are shown in Table 3. All but one lived/practiced in the following Texas counties of Harris, Fort Bend, Waller, Galveston, or Montgomery. One patient resides in Fairfield County, Connecticut. All the T2DM patients had been diagnosed with T2DM (M=diagnosed 21.88 yrs.), stay with current physician/healthcare providers (M=11.5 yrs.), medical insurance coverage, were between the ages of 24 to 75 (M=65.5 yrs.), women (100% - no male patients were interviewed), covered by medical insurance (100%), and under the care of a healthcare provider's practice with the specialty of treating T2DM.

Figure 2

Patient Demographic Information

T2DM Participants	Age	T2DM Diagnosed	Place of Residence	Current Stay with Physician	Race
#1	75 YRS	55 YRS	FAIRDIELD STRATFORD	10 YRS	AFRICAN AMERICAN
#2	71YRS	20 YRS	HARRIS PASADENA	20 YRS	CAUCASIAN
#3	58 YRS	7 MNTHS	MONTGOMERY CONROE	7 MONTHS	AFRICAN AMERICAN
#4	61 YRS	31 YRS	FORT BEND HOUSTON	12 YRS	AFRICAN AMERICAN
#5	59 YRS	7 YRS	KATY	7 YRS	AFRICAN AMERICAN
#6	69 YRS	16 YRS	KATY	13.5 YRS	CAUCASIAN

Figure 3

Healthcare Provider Demographic Information

DM Healthcare Provider Participants	Specialty	Years of Practice	Credentials	Location of Practice
#7	Doctor of Nursing	30 YRS	DNP	HARRIS/ GALVESTON
#8	Critical Care Nursing	20 YRS	CCN, RN	HARRIS/ PASADENA
#9	Psychology/Counselor	13 YRS	PhD, LPCS	FORTBEND/ KATY
#10	Diabetes Educator	43 YRS	MPH, RRT, RCP	FORTBEND/ HOUSTON

Data Analysis

The audio recording obtained through the in-depth interview process was carefully listened to and transcribed for qualitative data management and analysis (Adu, 2019). The Modified Van Kaam approach, which has been popularized by the Moustakas methodical approach guided the qualitative data analysis and coding process (Alase, 2017). The data analysis phase involved several steps, which required continual reflection while answering analytical questions, compiling data, making interpretations, and writing final reports. During this phase of data analysis implementation of transcribing, organizing and preparing, interpreting the meaning of emergent themes, interrelating the

themes, expanding upon the found ideas, coding manually and through the use of NVivo and formulating a final synthesis. Relevant words and phrases such as "medication adherence", "key elements for PPR partnership", "life-time commitment", "effective communication," and "foundational elements for T2DM care" were highlighted through open coding, and thematic analysis (Medelyan, 2021). The categories were expanded or collapsed during the axial coding phase of the qualitative data analysis, and the relationship between the thematic categories were identified. In-depth interview informational data and demographic details were extracted from the T2DM patient and healthcare provider questionnaires - reviewed and used to assist in interpreting the individual narratives (Husdal et al. 2021). After this information was researched – the researcher reflected on all the themes and subthemes, then finally an overall theme was identified. The overarching themes identified were relevant and aligned to the research questions.

A preferred mixture of manual and qualitative analysis software of NVIVO was used, due to the data set was more extensive, using an automated look after the manual transcription and coding was utilized. I assigned codes to the participants' transcribed data, after which I merged the similar code principles to form the categories. Similar codes of principles referred to similar shared experiences shared by the participants. The mixed transcription helped me get a broader sense of the transcribed data gathered. Over time, codes were refined, by adding, collapsing & expanding categories. The ability to identify new codes is one of the key benefits of alternating approaches with the manual coding approach and the use of NIVO software approach (Adu, 2019).

Ethics Procedures

The IRB approval number for this study expired on July 10, 2023. All the participants were informed, in writing and verbally, that their participation in this study was totally voluntary. The informed consent document was obtained from all T2DM participants and healthcare providers participants before commencing of their in-depth - one-on-one interview process. The names of the participants were not used in any time during this research study. Each participant was given a participant's identifier code for their privacy and protection. The completed audio tapes were secured, not available for use by anyone else, and the tapes were safeguarded in a safe. Finally, all the participants were informed in advance that they could end their participation with the study at any given time of their choice. The participants would still receive the $25.00 VISA Gift Certificate if they chose to withdraw; however, there was no participant's withdrawals from either the T2MD individuals or the healthcare providers.

The demographic characteristics for the T2DM patients (n=6) are listed in Table 3 all the T2DM participants included in the data analysis lived/practiced in the following Texas counties of Harris, Fort Bend, Waller, Galveston, Montgomery and one in the Fairfield County of Fairfield, Connecticut. The T2DM participants mean average age was 65.5 years old. The mean T2DM year's diagnosis was 21.88 years and they have stayed with their physicians practice for a time length of 11.5 years. All the T2DM participants were 100% insured. The physician/healthcare providers (n=4) are listed in Table 2; the physician/healthcare providers practiced in the following Texas counties of Harris, Fort Bend, Waller, Galveston, Montgomery and one in the Fairfield County of Fairfield,

Connecticut. All physicians practiced with 100% medical insured patients. The mean years of medical expertise practice was 26.5 years.

Findings

There were five emerged themes developed from the three basic research questions of the study. Theme 1: Most patients recognize the importance of the PPR relationship (HBM constructs: perceived severity and perceived susceptibility); Theme 2: Many patients have grievances with their medical treatments (HBM constructs: perceived benefits and barriers – perceived negative impacts on health); Theme 3: Healthcare providers consider trust and respect as essential in PPR relationships (HBM construct: cues to actions – prompting interactions with individual changes); Theme 4: Communication elements contributing to Diabetes Self-Management Education Programs (HBM constructs: cues to actions – prompting interactions with individual changes and self-efficacy) and Theme 5: Providers recommend more times with their patients and greater willingness to forge a partnership with them (HBM constructs: cues to actions – prompting interactions with individual changes and self-efficacy).

RQ1

RQ1 was: What are the perceptions of patients with Type 2 diabetes (T2DM) regarding therapeutics relations with healthcare providers as it relations to the constructs of the health belief model, and the Diabetes Self-Management Education Program?

This theme is based on responses to the following seven open-ended questions to the six T2DM patients*:*

- How well do you think you manage your T2DM?

- How long have you been diagnosed with diabetes (T2DM)?
- In your view, how serious is the risk of your T2DM?
- Do you have a clear understanding from your healthcare provider(s) how to effectively manage your T2DM health care plan?
- What is going well with the PPR relationship?
- What could be improved to promote a better PPR relationship?
- Why is the patient-healthcare provider(s) relationship important to you?

Theme 1. Most Patients Recognize the Importance of the PPR Relationship

Most T2DM patients recognized the importance of the PPR. Generally, the PPR relationship is entered into by mutual consent between physician/ healthcare provider and patient, unless a limited relationship between the physician/healthcare providers is established without the patient's agreement. Most participants reported that this is a relationship that develops gradually over time. Patient #6 stated: "…it is important to me that the physician-patient relationship develops slowly into meaningful PPR relationship." Some patients recognized self-interest in this, as Patient #6 continued: "I know that I am supposed to do for my care of my T2DM and I should keep a good relationship with my physician, to allow me to receive the best health outcomes for myself."

Other patients explained that they had no choice to about gradually developing a meaningful relationship. For example, Patient #1 said,

> The patient-physician relationship is important to me because my life is dependent on it. I am an elderly individual and I must trust and believe in my

> physician/medical team - I have no other choice. If I should lose this key concern, then I don't think I need my physician or medical team and the relationship is null and void.

Patient #1 above had very positive interactions through their physician - patient relationship in the treating of their T2DM management. As Patient #2 also reported that in their physician-patient relationship, they were trustworthy of each other and so they had a fundamentally strong relationship. Patient #2 continued: "The patient-healthcare provider is a lifetime commitment, so it is important to have a positive and meaningful PPR relationship!"

The physician-patient relationship should demonstrate certain key elements in order to develop a strong PPR relationship. The development of a strong PPR relationship will eventually lead up to an effective therapeutic relationship. The following comments illustrate the significance of a gradual relationship from patient #2:

> The three key elements that has been exhibited within these last 10 years between my physician and myself has been positive dialogue and elements such as trust, communication and personalized care for my T2DM has evolved through this relationship.

Patient #4 stated: "The physician - patient relationship is a consensual relationship that the physician has accepted my medical problems and has agreed to accept me as their patient." As the healthcare provider relationship grows in time, most patients believed that this demonstrates that someone truly care for them. Patient #5 stated "By placing my trust in my doctor… it has helped me to develop loyalty, trust and

mutual understanding for his expertise understanding my chronic disease of T2DM." Patient #6 continued "If my healthcare providers and I don't have a mutual trust and understanding toward each other, then we know longer need to be in a therapeutic relationship and go our separate ways." However, Patient #6 expressed sarcastic criticism toward her HCP. She was very upset with her HCP encounter she had just visited with: "The only good thing that is going well in my therapeutic relationship with my healthcare provider is her accessibility and that's a laugh ..... Time management is very important to me!"

Even allowing for possible disappointments, all the patients expressed the importance of long-lasting nature of their PPR relationship and the importance of trust in it. As Patient #5 stated: "Effective communication is essential to element in developing a long lasting relationship between the physician-patient relationships. Without this there is essentially no trust in this medical relationship."

Theme 2. Many Patients have Grievances with their Medical Treatments

This theme is based on responses to a series of 5 open-ended semistructured questions to the patients:

- How often do you routinely visit with your healthcare provider?
- Do you routinely discuss and understand your laboratory results & routine medications during your medical visit?
- What is your understanding from your healthcare providers(s) of the risk associated with you not following recommendations for managing your T2DM?

- Can you explain how your healthcare provider (physician) communicates with you (the patient) in your own words? and Why are the patient-healthcare provider communication tools important in your T2DM care plan?

The HBM constructs that related to this research questions were: (c) Perceived benefits and barriers – perceived negative impacts of health – PPR development of trust, compassion & empathy.

All these patients had grievances that affected their relationship with their provider. There were four types of grievance, relating to the competence of the provider, the provider's communication skills, financial concerns and scheduling problems. Several patients reported issues that concerned or frustrated them with their medical treatment. One reported a lack of competence or a lack of continuity, which created a sense of uncertainty; for example, staff giving mixed messages to the patient, which reinforced a sense of uncertainty portrayed to the patient.

> As Patient #3 stated: The physician had poor T2DM knowledge and contents of this chronic disease!!! How can you treat something and you don't have the basis of the treating this disease? I must be crazy to have him as my physician?

Several patients complained of having received poor medical information from their healthcare provider or having not obtained medical information in a timely manner: Patient # 6 reflected that: "It is very important to keep a good relationship with your physician and healthcare providers, if not the PPR relationship get larger and barriers can possibly develop."

Indeed, some of the patients felt that they had no choice or control in the selection of their physician-patient relationship. It seemed that they had low expectations for their healthcare provider and felt they were being punished by having their specific health care provider. For example, Patient #3 stated:

> Because I was under this specific healthcare provider, I couldn't change and get a more informative partner of health. I felt she would be punished if I went against my referred physician that her medical insurance recommended her to go to.

Poor Communication. Most of the patients reported very basic and unidirectional healthcare rendered services – advising, informing, instructing the individual to manage their T2DM. Very often it was felt that the medical information conveyed was done in a generic manner and lacked evidenced based principles or patient engagement.

As one Patient #1 continued:

> Although there are language barriers that truly exist, I don't think it is necessary to change my physician at this point in time. I don't wish to not be treated by a physician and the information that was given to me lacked evidence-based practices in the field of T2DM by this physician …I did my own medical research and asked other related healthcare professionals!

Patient #1 had no understanding that there are no punitive sanctions toward individuals changing their medical physicians, due to a mix-match physician style of their patient-physician relationship. Poor communication seemed to be a major contributor.

She displayed her mistrust of her medical providers throughout her entire in-depth interview: “The T2DM strategies aren’t clear to me.”

The physician nor his nursing staff aren’t satisfying my personal concerns or treatment modalities, as a patient. During the one–on-one interview with Patient #5’s perceptions of the received medical care included that language barriers between her physician and herself lead to many levels of miscommunication within their PPR relationships. Miscommunication within the PPR relationship can reduce both parties' satisfaction and possibly lead toward decreased quality of healthcare delivery and effective communication exchanges between the physicians - patient relationship. Another perceived perception by Patient #1 echoed:

> It is very hard to understand some of the words that my physician is saying, because she has a very thick accent. I don’t want to seem ungrateful to my physician, so I don’t ask her to repeat herself over and over. I know that I am only cheating myself, but I am old and it is very hard to find a willing physician to treat you on Medicare Insurance.

Poor communication in the physician-patient relationship was also an issue for Patient #3: “One of the major issues between my doctor and myself was the inability of the healthcare team (including the physician) to effectively communicate to me, not at me.” Patient #3 also continued that:

> This poor communication led to greater frustration with the PPR relationship: I have made a terrible mistake to have kept this doctor for the care of my diabetes. I feel that he can’t be trusted and doesn’t have my best interest at hand!

I will be seeking another doctor and care team for my future diabetes care.

Financial Concerns. Financial concerns regarding medical treatments were brought up throughout the interview processes for some of the patients. This is especially of interest if the T2DM treatment involves recurrent healthcare and laboratory costs, as Patient #3 pointed out: "……at times there are financial concerns with quarterly laboratory requests, the re-ordering of my routine diabetes medications, and the actual costs required for the physicians visit. Sometimes, the medications prices increase without any notification. "This was confirmed by Patient #1: "……. sometimes my insurance benefit plans changes and the financial cost of my services increase…. I have no choice, but to try to pay it!!"

Scheduling Problems. Many patients found challenges with their personal time scheduled alignment and the available physicians/ (healthcare providers) offered time accommodations (including specific work days and block time scheduling). According to Patient #3 perceptions: "many times I have problems making an appointment with the physician or I have to settle with an unreasonable date to see the healthcare provider."

RQ2

RQ2 was:

- What are the perceptions of healthcare providers with Type 2 diabetes (T2DM) patients regarding their therapeutic relationship with patient's as it relates to the constructs of the health belief model, and Diabetes Self-Management Education Program?

The data for this theme were from responses to three open-ended semistructured question given to healthcare providers:

- Do you recommend your patients to attend approved DSME Programs?
- Do you feel this is sufficient time to treat and educate the patients? and
- Do you think your current practice of care between the patient-healthcare provider relationships is effective?

In addition, data was derived from an open-ended question given to the patients:

- Why is the patient-healthcare provider(s) relationship important to you? (Prompt - could you please give me an example of why this element is important to you).

The theme that emerged from RQ 2 was Theme 3, that providers, like patients consider trust and respect as essential in the PPR relationship. The HBM construct that related to this research questions were Cues to action – prompting interactions with individual changes.

Theme 3. Providers Consider Trust and Respect as Essential in the PPR Relationship

The data for Theme 3 were gathered from the responses to 5 open-ended questions asked to the healthcare providers:

- What services do you provide to the patient?
- As a healthcare provider, what is the length of time allocated to each T2DM patient?
- Do you feel this is sufficient time to treat and educate the patients?

- Do you think your current practice of care between the patient-healthcare provider relationships is effective? and how often do you interact with the patients?

Healthcare providers consider trust and respect as essential in the PPR relationship. The healthcare provider considers the foundation of the PPR relationship to build on the fundamental basis of trust and respect exchanged between the physician/healthcare provider- patient PPR relationships. HBM Construct (d) Cues to action – prompting interactions with individual changes.

All of the healthcare providers reported that they were doing their best to care for the T2DM patients. They described their daily education strategies, T2DM tasks for the patients, encouraging and advising the patients to stay on the diabetes mellitus strategies and emphasizing the importance of staying compliant on their diabetes care plans. One provider gave special attention to the role of the provider as an advocate or champion for the patient:

> HCP #3 stated that I am my patient's health care advocate. Many patients don't have any family or significant person to support them. This can lead to have a lack of self-confidence, so I must be that family, the significant other or simply the presence of someone that they currently don't have. If I don't develop a strong patient-healthcare provider relationship, then I have failed my Hippocratic Oath as a caregiver and I shouldn't practice medicine anymore.
>
> HCP #3 continued: Patients must be able to trust doctors and healthcare providers with their lives and health pathways," and that once this core element

> of trust has been established between the healthcare providers - maintaining the trust is one core guidance factors for physicians and healthcare providers…….

One of the healthcare providers expressed one of the key elements shared in her daily physician-patient relationship at their medical practice the need to offer 1:1 – patient center care to their patients versus indirect care. The healthcare provider #3 was concerned that non-patient contact decreased the effectiveness of the PPR relationship: "In patient sessions versus Zoom or some form of telephony is more effective and is very important to the cohesiveness of my practice. I practice 1:1 patient-centered medical sessions – my role is respective versus authoritative." Another HCP# 4 stated that: "Some of my patients have complained that I haven't given them the proper diabetic tools or resources for them to be successful in addressing their T2DM treatment plans."

One of the healthcare providers #4 expressed the importance of long-lasting nature of their PPR relationship and the importance of trust: "Effective communication is essential to element in developing a long lasting relationship between the physician-patient relationships. Without this there is essentially no trust in this medical relationship." Some of the healthcare providers offered various experiences of what is needed to maintain a high level of care. One of the healthcare providers emphasized the role trust, confidence and interactive communication exchanges as key elements between in the medical partnership. Another explained how respect and confidence were fundamental to her focus on supporting the patient at all times, and ensuring that the diabetes plan of care is aligned to work with behavior modification: HCP #3 reflected:

> I must develop a strong patient-healthcare provider relationship! It is important in my healthcare role to focus on the needed behaviors exhibited by the patient and to focus on patient-centered care. I keep a 1:1 ratio between the patient and their healthcare provider relationship - only focusing that specific time allotment on them. It is important that the fundamental levels of respect and confidence is established versus portraying only my authoritative figure to the patient. My focus is to help change the behaviors to allow the patient to reach their diabetic goals.

If clear and concise information is given to the patient, in turn they will have a better health outcome and their daily practice for T2DM will improve. As one HCP # 2 stated:

> The relationship starts at the beginning of the patient-healthcare journey. The educational foundation and understanding must be clear and concise for the patient to understand, then to apply this to their daily living practice…Hopefully to improve their health outcomes.

RQ3

RQ3 was: What are the recommendations of the T2DM patients and healthcare providers on how to address any challenges in their patient-physician relationship, as they relate to the constructs of the health belief model?

Theme 4. What patients wanted most from their provider was to be acknowledged and seen as human beings

This theme was based on responses of patients to the following questions:

- Do you have a clear understanding from your healthcare provider(s) to effectively manage your T2DM health care plan? If so, what about do you think was their communication and most beneficial learning tools for you?
- Why is the healthcare provider-patient communication important in effective diabetes care plan?
- Can you explain how your healthcare providers (physician) communicates with you (the patient) in your own words?" (Prompt- Are there additional ways that your healthcare provider communicates with you?)

This theme was eloquently stated by Patient #4, when they reported on a negative experience with the doctor:

> The physician behaved as if he was reading the Diabetes Self-Management Program book…he looked at me when we conversed and talked to me, one of those physicians who just sit there and take notes and write it on my progress documentation form and at the same time…. simply saying yes, okay, yes and then we move on to the next subject bothering you …. Are you understanding what I am asking you to do..... He tried to keep eye contact with me and talk to me.

This patient's perception of her physician's medical competency of T2DM became questionable. The participant wanted the physician to teach her the basics of the Diabetes Self-Management Program in a language that she understood. The perception of the patient was that the physician did not know the information regarding the management of T2DM programs, since he was reading the book. The patient's perception

also was that physician spoke above her comprehension level, instead of directly talking to her in a less formal manner. It didn't seem as though the physician was really knowledgeable about the subject himself. Patient #3 shared another similar experience:

> The diabetes health care plans were not clear to me and I didn't understand what was expected of me. I am expected to change my current behaviors and alter my ways of life, but the physician is speaking the impossible to me. I simply don't know what he is talking to me about. I want to participate in the Diabetes Self-Management Education Program, but it is too many things I don't understand.

The participant perceived the providers may have good intentions but may lack training in linguistic competency. This uncertainty contributed to the participant feeling that lack of competence in her physician or sense of uncertainty in their medical performance, for example: Patient #3 continued "The doctor isn't satisfying my health concerns! Why am I here with this doctor?" Another continued patient stated: "The doctor isn't connecting with me. I am not benefitting for coming to this physician, but this is the recommended doctor that I was referred to from my Primary Care Physician. I hadn't any choice. I feel like my time is ticking quickly!" Patient #5

Another participant's perceived perception was that the physician had a lack of medical diabetes mellitus knowledge and was not proficient in the treatment of T2DM.

This was Patient #1, who stated:

> This medical doctor had a lack of diabetes mellitus knowledge and I question his competency in the treatment of T2DM. I asked him questions and he just stares at me, pauses then remarks. His hesitancy made me question his knowledge

background on the subject matter. Patient #6 perception was clear about what they needed:

> ….it is a necessity for an equal partnership within her PPR relationship, in which her healthcare provider presented their partnership as an educational partner rather than being an authority figure. It was felt that because of their unique PPR relationship - the relationship has strengthened over the past years.

Theme 5. Providers Recommended More Time with their Patients and Greater Willingness to Forge a Partnership with Them

The data for this theme were gathered from the healthcare providers by asking four open-ended questions given:

- Does your practice have any patient monitoring tools or cues to ensure that PPR relationships have effective communication exchanges that promote effective PPR relationships? (Prompt- If yes, can you give some examples)
- Does your practice have any patient monitoring tools or cues to ensure that PPR relationships have effective communication exchanges that would promote effective PPR relationships?" (Prompt- If yes, can you give some examples)
- How does your medical practice assist the patient with dealing with perceived health barriers, such as T2DM?
- Do you recommend your patients to attend approved DSME Programs?

HBM Construct (d) cues to action – prompting interactions with individual changes and HBM Construct (e) self-efficacy - the ability of the participants to promote change and produce improved outcomes.

One of the experienced critical care nurses explained that the nursing staff does their best to give quality time/service to all of their patients; however, they are under a time allotment that they need to completely serve the patients. Due to the time restraint, this is a huge barrier to effective educate and check for compliancy for the T2DM patients. HCP #2 reported:

We give direct patient care to every patient that enters or facility and actively involve the multidisciplinary team in the care of all our diabetes mellitus patients (especially T2DM patients). One of the challenges for chronic T2DM patients is the lack of time allotment for proper DSME educational program and the lack of DM resources to distribute to the patients. "We do refer them to related diabetes programs in the community." HCP #2

In alignment with some of the T2DM patient's narratives during the in-depth interviews, most healthcare providers provide the best care for the patients as soon as possible, but their time is limited and their treatment become perfunctory. For example, HCP#8 stated that her role as a diabetic educator was to receive the patients, check their vital signs (including their blood sugars & current weight), assist the patient to be seen & assessed by the Endocrinologist, and assure that the patient is adhering to their diabetes care plan as ordered (inclusive of their medications). Another HCP #3 described discussing treatment options toward their diabetes self-management program:

> "Through behavioral challenges patients get stuck in specific patterns and they do not even realize their existing state of confusion. In these situations, the healthcare provider provides specific interventions made to assist in the patient's behavior challenges, to allow the individual the opportunities to formulate their T2DM

treatment plan.

It is important that the HCP and patient validate the existing medical challenges experiences together and reach a workable medical intervention to assist in achieving in the management of T2DM. As one HCP #10 reported: "Validate their DT2M experiences together, then trouble shoot from their existing challenges or areas of confusion to assist in improving their self-esteem toward their goals of reaching diabetes self-management programs."

Another HCP #2 stated: Behavioral challenges such as non-compliance of specific care for attaining diabetes self-management are faced on a daily basis, if the patient is not willing to be adaptive to new behaviors. Another healthcare provider #2 described: "the significance of healthcare provider-patient engagement, discussing T2DM treatment options and allowed the patient to attain information to make informed decisions regarding their treatment plans."

> "Make sure that you always try to engage the T2DM patients with suggestions and a variety of methods for their treatments of choice and try to provide an in-depth explanation about the chosen T2DM treatment, such as using their Dexcom G6/ G7 glucometer device." Patient #4

Summary

The purpose of this phenomenological qualitative research study was to better understand the challenges faced between physician/ or other healthcare provider (HCP) and the T2DM patient in clinical settings for diabetes self-management care. Aside from the participants' demographic information, the study explored the lived experiences,

physical and psychological barriers, communication exchanges and financial concerns of the combined participants. The five qualitative themes that emerged through this study were:

Theme 1: Most Patients Recognize the Importance of the PPR Relationship in terms of the perceived severity of and susceptibility to the illness; the impact of social consequences related to family life or social relationships. The combination of HBM construct (a) perceived severity and (b) perceived susceptibility – has been identified as Perceived threat (Kushner & Mechanick, 2016). The alignment between all the themes and constructs is explained in chapter 5.

Theme 2: Many Patients have Grievances with their Medical Treatments- HBM Construct (c) Perceived benefits and barriers – perceived negative impacts of health – PPR development of trust, compassion & empathy. Grievances can originally stem from healthcare facilities to eventually migrate to the healthcare provider's individual office visits. There are various levels of grievances that can evolve from the patient perceptions.

Theme 3: Providers Consider Trust and Respect as Essential in PPR Relationship - HBM Construct (d) cues to action – prompting interactions with individual changes. The fundamental concepts of respect and trust within the PPR are very important to establish and strengthen the stability of the PPR relationships; and

Theme 4: What Patients Wanted most from their Providers was to be acknowledged and Seen as Human Beings - HBM Construct (d) cues to action – prompting interactions with individual changes and HBM Construct (e) self-efficacy- the ability of the participants to promote change & produce improved outcomes. The T2DM

patient's and healthcare providers findings were revealed throughout this process. The importance of demonstrating medical literacy competency was also found to be a significant finding through the perceptions of several T2DM patients. Increased healthcare provider-patient communication has been shown through the interviews to positively influence and improve health outcomes by the increasing patient responses, which can lead to greater patient understanding of health problems surrounding the T2DM disease process and could contribute to a more compliant adherence to treatment plans, and providing support and reassurance to the PPR relationship. Both and healthcare providers - patients confirmed the importance of giving clear & concise information to the patient at all times, throughout their association with their service is essential in the PPR relationship.

Theme 5: Providers Recommended More Time with their Patients and Greater Willingness to Forge a Partnership with Them - HBM construct (d) cues to action, which focuses on the individual interactions to want to change and (e) self- efficacy - the ability of the individual to promote change and to work on strengthening for the PPR partnership. When patients and healthcare providers demonstrated effective partnerships, the relationship became more fluid. The willingness of the healthcare providers to work harder to forge a stronger PPR partnership and work toward increased time allotments developed into the PPR relationship – this enabled more benefits for the patient and intermittent assessments can assist, in evaluating the effectiveness of the PPR team functions and performances, including assessments by patients themselves. This assessment was significant to identify and illuminate the PPR relationship toward the

functioning and the strength of the healthcare providers partnership with patients (Burum, 2021).

In Chapter 5, I will re-evaluate the research questions, provide an interpretation of the findings, present limitations of the study, implications for social changes, and present recommendations for future research.

Chapter 5. Discussion, Conclusion and Recommendation

Introduction

The purpose of this phenomenological qualitative research study was to better understand the relationships between healthcare providers and T2DM patients within the clinical settings for diabetes self-management. I identified common gaps in T2DM patients with grievances of their medical treatments and self-efficacy of people with T2DM as well as other perceived enablers of, and barriers to, diabetes self-management education programs in this targeted population. A combined sample of 10 T2DM patients and healthcare providers were interviewed. I used the HBM as the theoretical framework and the DSME as the conceptual framework for this study. I used these frameworks to understand the perceptions of the patient-healthcare provider's relationships in the management of Type 2 diabetes. Chapter 5 includes a detailed discussion of the interpretative findings of this study, limitations of this study, and recommendations for patients, healthcare providers and relation medical professional and the implications for social change. The three research questions for this study were:

1. Research Question 1 (RQ1): What are the perceptions of patients (ages 24-75) with Type 2 diabetes mellitus (T2DM) regarding their therapeutic relationship with

healthcare providers as it relates to the constructs of the health belief model, and the DSME standards?

2. Research Question 2 (RQ2): What are the perceptions of healthcare providers with Type 2 diabetes (T2DM) patients regarding their therapeutic relationship with patients as it relates to the constructs of the health belief model, and the Diabetes Self-Management Education standards?

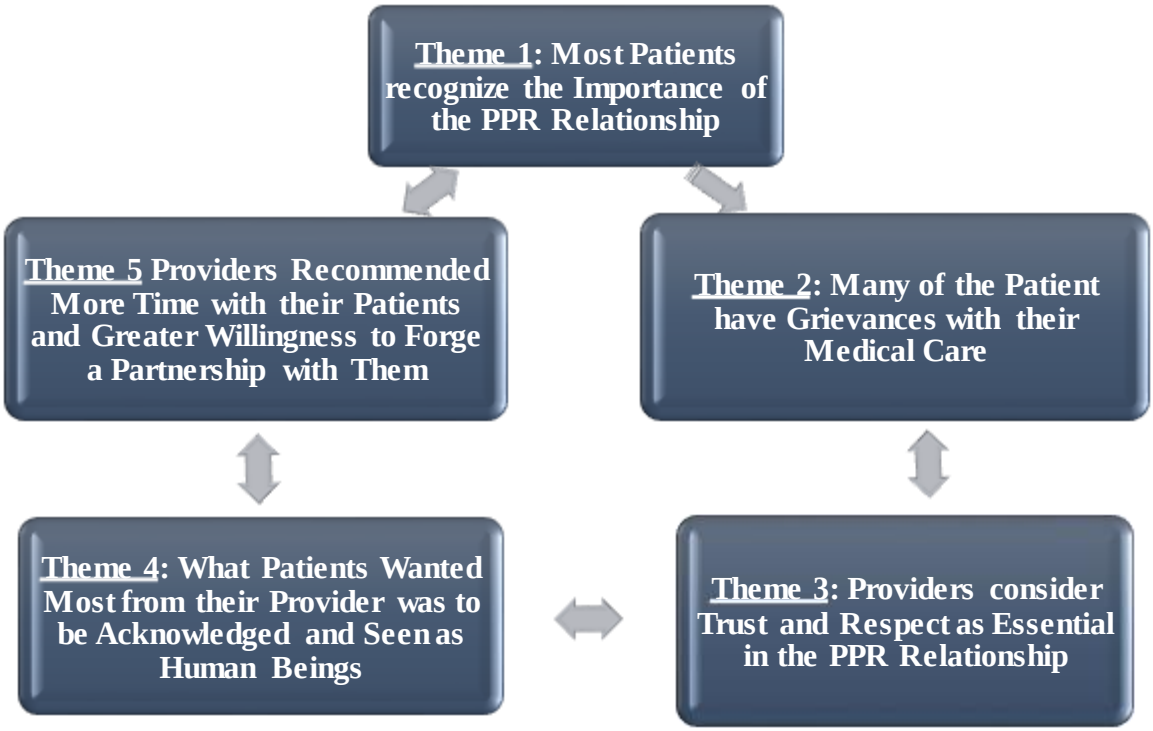
3. Research Question 3 (RQ3): What are the recommendations of T2DM patients and healthcare providers on how to address any challenges in their patient-physician relationship, as they relate to the constructs of the health belief model?

Interpretation of the Findings

The four themes in this study were: (a) most of the patients recognize the importance of the PPR relationship, (b) many of the patients have grievances with their medical treatments, (c) providers consider trust and respect as essential in the PPR relationship, and (d) communication elements contribute to diabetes self-management education programs. The five themes which evolved were seen as part of a continuum as shown in:

Figure 4

Perceptions of Patients and Healthcare Providers Relationships in T2DM Management



The majority of the patients involved in this study recognized that their personal responsibilities for the care of their T2DM was to be able to change to adopt self-management behavior changes. The healthcare provider/patient relationship involves an immense amount of vulnerability and trust toward each other.

Theme 1: Most of the Patients Recognize the Importance of the PPR Relationship

Theme 1 was that most T2DM participants recognized the importance of healthcare providers their relationship with their healthcare providers around specific key elements such as: mutual knowledge, trust, loyalty to each other, and regard. The importance of PPR relationships between healthcare providers and T2DM patients has

been acknowledged and supported repeatedly through several studies (Hudson et al. 2021; Johnson, 2019). I confirmed that knowledge refers to the healthcare providers' knowledge of the actual patient as well as the patient's knowledge of the healthcare providers' professional discipline. These findings would also include the in-depth medical knowledge of T2DM. Trust evolves through the patient's faith in the healthcare providers' competence and caring, as well as the healthcare provider's trust in the patient and the beliefs and report of the individual symptoms. Loyalty is recognized by the patient's willingness to forgive their healthcare provider for any inconveniences within reason or mistakes and the healthcare provider's commitment and dedication to not abandon their patient. It is important for the patient to feel that the healthcare providers are in this medical journey for the duration of their medical care from their healthcare provider. healthcare providers'. It is also necessary that the patients feel like their healthcare provider is on their side. My findings were similar to those in previous studies regarding trust, empathy, loyalty and medical competency. I also determined other key elements such as finding additional medical resources for the patient, health literacy, and language barriers.

Key elements such as caring in the PPR relationship, competency of the healthcare providers, established loyalty, respect and trust surfaced throughout my data, confirming other related studies such Husdal et al. (2021) and Sabety (2023), who showed that patients value the PPR relationships and that the PPR positively impacts patients' health outcomes. My findings also confirm earlier work by DeAngelis (2019) showing that the loss of an HCP-patient communication disrupts patient care, therefore

leading to an ineffective relationship between the patient and physician (healthcare provider) relationship.

HBM constructs seen in Theme 1 were: (a) perceived severity and (b) perceived susceptibility. The T2DM patient's findings through this study demonstrated the acceptance of their current state of their chronic disease process of T2DM and transforming to new adoptive behaviors to promote health changes for T2DM self-efficacy programs. In combining the HBM constructs of (a) perceived severity and (b) perceived susceptibility – this has been also identified as perceived threat (Kushner & Mechanick, 2016).

The perceptions of healthcare providers with T2DM patients regarding their therapeutic relationship with patients as it relates to the constructs of the health belief model, and the Diabetes Self-Management Education Standards through Theme 1 directly related to the health belief model constructs and supported through the standards of the diabetes self-management education programs. These findings support RQ1 and RQ2.

Theme 2: Many of the Patients Have Grievances with Their Medical Treatments

Theme two recognizes the most frequent cause of identified challenges in this study was patient perceptions of identified grievances for treatments of their T2DM management and specifically the perceived lack of knowledge presented by the healthcare providers to adapt to tailored T2DM treatments for individuals. Fifty percent of these participants had expressed some form of grievances against the partnership of the healthcare providers' – patient relationships. Previous studies have also revealed this

same problem, which seems to be linked to the general organization of public sector hospitals.

Patient Factors

For example, a series of patient factors identified in my finding results were compared below with the findings of Shabbir, Usman & Yu-Chuan (2017). In this study findings of Shabbir, Usman & Yu-Chuan (2017) in developing the establishment of new PPR relationships – the key elements of trust between the healthcare providers – patient had not been established yet, due to the PPR relationships in is the beginning stages. Trust is one of the key components of a strong PPR relationship. These finding results were also reflected in my current study between the healthcare provider's relationships. Shabbir, Usman & Yu - Chuan (2017) findings also demonstrated that the healthcare providers' - patient still does not know each other in the earlier PPR relationship stages. It is significant in gaining a strong PPR relationship that the healthcare providers – T2DM patient become familiar with each other, to have an effective and meaningful relationship.

Other patient factors revealed through Shabbir, Usman & Yu-Chuan (2017), study were family pressures - families challenging the healthcare provider's medical competence or the healthcare providers. Many families do not think the best interest at hand is centered on behalf of the patient – the findings in my study did not substantiate the family pressure challenges involved with T2DM participants – being patient centered, however does recognize these challenges do exist in the PPR relationships.

One other significant patient factors that were abstracted from the study of

Shabbir, Usman & Yu - Chuan (2017) were findings which revealed difficult patients - the healthcare providers. The healthcare providers –T2DM patients do not like each other, have a poor working relationship toward each other, and there is a lack of confidence in the performance perceived from the patient regarding the medical professional competencies - comparatively the findings in my study did not substantiate these existing difficulties between the healthcare professionals – T2DM patients.

Another significant patient grievance previously identified by Yace (2018), was related to health literacy. Health literacy is comprised of the process for the T2DM patient to find, receive, understand their medical information given directly to them by their physician or designated healthcare providers to assist in making health-related decisions. The patient grievance's identified many challenges amongst their healthcare providers' health literacy competencies, because they were unable to completely assist the T2DM patients. Yace (2018) study reported a lack of medical information competencies among healthcare professionals and patients, while DeAngelis (2019) found language barriers between the healthcare providers and the patients. My findings confirm that T2DM patient participants identified language barriers leading to ineffective communication leads to challenges in the PPR relationship.

Systemic Factors

In factors affecting the patient grievance theme that were identified, through this study the patients were concerned with office time restraints. Some healthcare providers offered limited time allotments regarding in-depth patient care sessions, extensive explanations of tailored medical treatment plan versus the findings supported that

healthcare providers have set healthcare providers time allotments – which can restrict the appropriate time needed to sufficiently treat the T2DM patients (Gerchow et al. 2021).

Another systemic factor that was identified through the patient's grievances theme was that patient's feel their physician/healthcare providers had limited space/room or designated patient privacy areas which was significant to their general healthcare Yale et al. (2018), however in my research findings the T2DM patients never raised space or privacy an identified barrier.

Gerchow et al. (2021) identified that high physician-patient ratio – where the patient feels that they are objects, rather than the actual patient that were being treated. The patients felt that sometimes they are overlooked for their own participation in the care of their treatment plans – the findings in this study indicated a small percent of participants agreed with Gerchow et al. (2021) findings and concerns were expressed not to go against their healthcare providers, because there may be associated consequences in the received medical care given to them.

Another significant finding identified through the study of Yale et al. (2018) were rising medical care costs, which were identified as financial barriers and level of concerns were vocalized from the T2DM patients. Qing et al. (2022) found healthcare provider's medical education competencies were challenged and the findings of this study supported that many T2DM patient's perceptions feel there was a gap in their healthcare providers medical training competency.

Unfortunately, through this study the data documented through these past studies and participants in this current study felt that the physician/healthcare providers did not have their best interest at hand. This uncertainty could contribute to the participant feeling that lack of competence in her physician or sense of uncertainty in their medical performance.

Healthcare Providers Burnout

Another grievance factor finding were healthcare providers burnouts. In the study findings of Gerchow et al. (2021), the study identified there were a lack of trust from the patient-to-physician relationship and the findings in my study did not conclusively support these findings, rather the finding indicated that the participants trusted their healthcare providers in the treatment of their healthcare. Sabety (2023) found findings that one of the behavioral consequences that has been expressed through this study has been physician burnout (e.g. ineffective communication between the healthcare providers – patient, which can put the healthcare providers in jeopardy via their trust with the patient. The healthcare provider's competency could also be placed in jeopardy and lead to making the patient feel insecure in regards to their medical competency – comparatively in this study did not substantiate this study due to T2DM patient perceptions data did not reflect information covering information regarding physician/ (healthcare providers) burnout leading to ineffective communication in the PPR partnership.

DeAngelis (2019) found the findings of mixed messages could be inadvertently sent out from the healthcare providers to the patient - giving them a false sense of

insecurity and the trust for the healthcare team could be in jeopardy - comparatively the findings in this study did not substantiate this study due to T2DM patient perceptions data did not reflect information covering inadvertent mixed messaged from their physician/ (healthcare providers).

Another comparative study finding of Gerchow et al. (2021) found that healthcare providers may lack linguistic training competency levels to suffice an effective trust for PPR relationship between healthcare providers – patients and comparatively this study my findings supported that many T2DM patient perceptions feel there was a gap in the healthcare providers' medical training competency, which leads to a lack of linguistic training competency.

Patient's complaints usually refer to an expression of a grievance and can lead to a dispute within a healthcare setting. These grievances are usually seen in healthcare organizations, specifically. Patient complaints have been identified in the healthcare organization, as resourceful tools to be monitored and lead to ways to improve patient satisfaction and patient safety (Mirzoev & Kane, 2018).

Patient complaint grievances usually do not reflect a systematic investigation of failure; instead, they usually represent individual patient experiences, which they have evolved through to get to this point. Some common complaints that turn into grievances from the patient's perception could be a delayed treatment plan, missed or delayed (Mirzev & Kane, 2018).

The finding in this study supports that barriers exists between the PPR relationships, which contributes to grievances slowly emerging toward the healthcare

provider teams. Lack of communication between the patient-healthcare providers decreases the communication exchange between the PPR partnerships (Sabety, 2023). HBM construct derived through Theme 2 was: (c) Perceived benefits and barriers – perceived negative impacts of health – PPR development of trust, compassion and empathy. Theme 2 focused on understanding the answers for RQ3.

Theme 3: Providers Consider Trust and Respect as Essential in the PPR Relationship

Theme three recognized through the participant's perception the importance of the healthcare providers – patient relationship to consider trust and respect essential in the PPR relationship. Trust is a key foundational element in the physician-patient relation. The healthcare providers - patient relationship lies at the heart of medical health care, and establishing patient trust is one of the fundamental aspects of a strong PPR relationship. As that relationship is established and strengthened, there is likely to be an improvement in long-term health outcomes (Johnson, 2019).

Trust building is an important step in developing high-quality healthcare providers - patient relationship and interactions during their care in the treatment of T2DM services (DeAngelis, 2019). Through this study, the participants continually reiterated the importance of trust and respect in the care of their medical treatments. The in-depth qualitative interview process found that less than 15% of the T2DM patients mistrusted and disrespected their physician. The lack of trust and disrespect perceived in T2DM patients was in this study was due to the some of the healthcare providers demonstrating a low level of medical knowledge - several T2DM patient perceptions in

this study expounded on the healthcare providers medical literacy for educating their patients on related T2DM resources or content expertise for the treatment of T2DM, no access to T2DM resources to offer the patient, poor communication interchanges with the T2DM patient - perceived T2DM patient ineffective communication exchanges, where the patient did not fully understands the received medical information from the healthcare providers, and a lack of empathy toward the above findings toward the patient. It was perceived by several T2DM participants the definition of empathy was that the healthcare-providers toward the patient should have the ability to comprehend or understand the individual's feelings, as well as sharing and acting on this concept during interpersonal interactions with the individual T2DM patient (Qing et al. 2022). It was found that the T2DM patients' perception of their healthcare provider's empathy definitely influenced the patient's overall trust in his or her medical expertise, and the patient's trust in physician negatively impacted the benevolence and competence of their healthcare providers. Through this current study, key elements such as empathy, medical literacy or medical knowledge, poor communication exchanges have significantly been confirmed (Lacey, 2023) and related in the findings of Qing et al. (2022). These elements such empathy, medical literacy or medical knowledge, and ineffective communication exchanges are important key elements in effective PPR relationships.

A wide range of evidence through this study and other studies has demonstrated that healthcare providers such as physicians, nurses and other related medical team members tend to provide better medical care that include key elements such as proficient medical literacy toward the patient, effective communication skills, knowledge of

medical resources and strengthen trust and respect through empathy toward the T2DM patients; however the perceptions of some T2DM participants remained unchanged, and that there is a need to improve proficient medical literacy toward the care of the patient. HBM construct derived through Theme 3 was: (d) cues to action – prompting interactions with individual changes (Agbre et al. 2018). Theme 3 theme helped identify answers RQ1.

Theme 4: What Patients Wanted Most from their Providers was to be Acknowledged and Seen as Human Beings

Theme four recognizes through the participant's perception the importance of the healthcare providers – patient relationship for communicating key elements to diabetes Self-Management Education Programs. A communication element that surfaced through the qualitative study was effective communication of information from the healthcare providers to the patient.

Diabetes self-management education programs involve interactive engagement between the healthcare providers - patient through behavioral activities such as healthy eating, strict medication adherence, monitoring your glucose levels on a consistent basis, weight management, reducing health risks, jointly problem-solving medical challenges between the healthcare providers – patients, effective communication exchanges and healthy lifestyle changes (Anderson, 2015). These contributing key factors are all necessary for the successful management of T2DM educational programs. Effective communication strategies can lead to fundamental elements such as trust and respect in the PPR relationship. Effective healthcare provider-patient communication has been

shown to positively influence health outcomes by increasing patient satisfaction. As the T2DM patient understands their health care problems and learns the treatment plans available to allow them to reach their goals; the PPR partnership will contribute to better patient compliance and adherence for their personalized treatment plans, and will provide support and reassurance to patients (Johnson, 2019). Personalized healthcare approaches researched in the findings of Johnson (2019) pertaining to healthcare providers conclusively shared similar findings in this study to improve patient care outcomes such as health planning and effectively engaging the patients in T2DM self-management programs.

The results of this study show that positive decision-making in diabetes self-management education programs is a result of an effective provider-patient communication in developing shared decision-making strategies in the planning and implementation of health goals. HBM construct derived through Theme 4 was: (d) Cues to action – prompting interactions with individual changes and (e) Self-efficacy - the ability of the participants to promote change and produce improved health outcomes.

The majority of the patients involved in this study recognized that their personal responsibilities for the care of their T2DM was to be able to change to new adopting diabetes self-management behavior changes. HBM provided the theoretical framework and DSME provided the conceptual framework to guide this study. Both of these frameworks helped in the understanding perceptions of the patient-healthcare provider's relationships in the management of Type 2 diabetes. The healthcare provider - patient relationship involves an immense amount of vulnerability and trust toward each other.

This experienced PPR relationship is one of the most moving and meaningful interchanges shared between one human beings to another human being.

Theme 5: Provider Recommend More Time with Their Patients and Greater Willingness to Forge a Partnership with Them

The effectiveness of a strong PPR partnership involves decisively increasing the time for the healthcare providers learning process, implementing alternative strategies that are tailored to the individuals needs and the ability to work through challenges that would be faced with T2DM. According to Wood (2023) challenges have been identified that through many PPR partnerships, many healthcare providers have been forced to increase their patient loads, due to decreasing medical reimbursements, mandated from medical insurances, to retain the same amount of financial income to their business practices. This means that the healthcare providers have shorter patient appointment visits and less time for PPR relationship building. The medical team considers their PPR relationships with patients to be one of the most rewarding aspect of their medical practices. This is one of the ongoing challenges that continues to face the health care providers – patient relationship partnership. One of the positive contributing factors of the PPR relationship is that if the patients feels that they can trust their physicians – individuals are more likely to follow their healthcare providers instructions due to their established open communication and PPR relationship. In order for the healthcare providers to establish this basic criteria within their PPR relationship - the healthcare providers – T2DM patients had to establish the abilities to take the time to listen to the

needs of their patients, understand their medical journey's, and show that the medical team cares ultimately cares for the patient.

Limitations of the Study

The findings are limited to 6 T2DM patients and 4 healthcare providers, so the sample size was only 10 and all participants were females. Another limitation was that the participants were basically limited to specific parts of Texas, with the exception of one participant in Stratford, Connecticut.

Significance of the Findings and Social Change Implication

My findings underline the relevance of relationship aspects in determining patients' satisfaction with the care received from healthcare providers. The healthcare providers were also an integral part of my study. In particular, healthcare providers should focus their attention on how information is translated, understood, and applied by T2DM patients. The problem identified in the beginning of this study was the effectiveness of therapeutic relationships between the T2DM patients - healthcare providers in the management of T2DM. Therapeutic relationships refers an interactive relationship with the patient, family(s) or professional relationships such as the interaction with healthcare providers. In this study, we have referred this relationship between the T2DM patients – healthcare providers (Tori, 2019). Low levels of ineffectiveness in therapeutic relationships, through this study included barriers to access to healthcare, inadequate communication exchanges, medical literacy, systemic factors, physician burnouts and decreased health outcomes for T2DM patients. It is essential to strengthen the PPR relationship between T2DM patients - healthcare providers in the

management of T2DM (Clark et al. 2017). Notably, this study revealed that the physician's/healthcare providers PPR relationships with communication did directly affect the therapeutic PPR relationship.

Physician and healthcare providers also may consider implementing strategies for effective communication strategies in the management of diabetes self-management education programs. Physician communication is central to influencing physician–patient relationship and elements of trust and respect has been identified as essential in the PPR relationship (Wang, 2022). There is a definitive need to improve educational reinforcement for T2DM patients by healthcare providers directly improving their PPR relationship. Medical interventions are needed to foster the T2DM patients, improve medical linguistic competencies, and to communicate and teach this targeted group population. This study also revealed that the findings of healthcare providers - T2DM patient PPR relationship of communication did affect the physician–patient relationship (Wang et al. 2022).

The significance of the study findings will assist in providing social change for T2DM patients, physicians, and healthcare providers with a better understanding of perceived expectations that this patient population needs to manage their T2DM medical interventional care plans. Diabetes self-management programs and support resource services empowers T2DM individuals to reach their daily and lifetime goals and to improve living well with T2DM (CDC, 2022). Consideration of these areas of educational reinforcement and T2DM interventions could enhance self-management of diabetes in T2DM patients and consequently improve their health outcomes. Social

changes can also be implemented for financial assistance gains from developing proper education in DSME programs and increasing the alternative strategies in managing T2DM. Social changes can also implement the use of technology in the alternative strategy pathways toward educating the patients DSME and strengthening the PPR relationships (Qudah & Luetsch, 2019).

Recommendation for Future Research

Understanding some of the factors that influence T2DM patient-healthcare provider's relationships, in the future, will help to directly address some of the barriers that prevent the adoption of more personalized self-diabetes educational programs. Future studies could include the continued impact of technology on patient-healthcare providers' relationships, and whether educational apps promote therapeutic alliances between the patient–healthcare providers.

Furthermore, designing of T2DM interventions that capitalize on how to improve patients' desire to reduce the progression of diabetes and the use of relevant technological devices could enhance diabetes self-management education programs. Improved approaches to address T2DM distress, improve the effectiveness of communication skills and improve the partnership between the healthcare providers – patient relationships, improve financial burdens, and their health professionals' perception of care as well as work and environment related factors are essential to foster improved diabetes self-management education programs in T2DM patients approaches to health care and effective communication exchanges.

Conclusion

The information gathered through this study could be useful in providing education interventions for healthcare providers with valuable insights to achieving better health outcomes with T2DM patients and diabetes self-management education programs. My findings underline the relevance of relationship aspects in determining patients' satisfaction with the care received. The initial study problem identified was the effectiveness of therapeutic relationships between the T2DM patients - healthcare providers in the management of T2DM.

In particular, healthcare providers should focus their attention on how information is translated, understood, and applied to T2DM patients. The information given to the T2DM patient should always be clear and concise to allow for clear communication between the PPR team.

This study was comprised a combination of 10 (healthcare providers) and T2DM patient participants using the qualitative one-on-one interview process. The survey questionnaires comprised of 22 semistructured open ended questions (T2DM participants) and 20 semistructured open-ended questions for the healthcare providers. Five qualitative themes emerged in this study: most of the patients recognize the importance of the PPR relationship, many of the patients have grievances with their medical treatments, providers consider trust and respect as essential in the PPR relationship, what patients wanted most from their providers was to be acknowledged and seen as human beings, and provider recommend more time with their patients and greater willingness to forge a partnership with them.

The study findings of the importance were: key concept elements of trust, respect and empathy between the healthcare providers and T2DM patients. Identified barriers that exist within healthcare relationships such as: ineffective communication exchanges between the healthcare providers – T2DM patient. The realization of health literacy and perceived lack of medical knowledge competency by the healthcare provider towards the T2DM patient, and that there are existing PPR problems identified by the T2DM participants that when unresolved by the healthcare providers - it disseminates to the related healthcare organizations (hospitals and clinics), through the form of health grievances.

Through the use of the HBM theoretical framework/concepts and guidance of the conceptual infrastructures of Diabetes Self-Management Education Programs this study can serve to assist implications for the use of physicians, healthcare providers, T2DM patients, guide future research and policy makers to improve the perceived perceptions between the healthcare providers and T2DM patient to use for the management of T2DM. Taking care of chronic illnesses like diabetes requires a unique PPR where patients can be empowered through diabetes self-management programs and diabetic education (ADA, 2015). Trust is essential to patients and inadequate communication between the healthcare providers - patient can cause delays in treatment and negatively affect health outcomes (Ley et al., 2016). Effective communication between the patient and healthcare providers is essential for the continued T2DM treatment plans and to improve health outcomes. The goal of the PPR partnership is to work as an ongoing team to strengthen

communications, manage an effective T2DM treatment care plan, and to reach the patient's optimal quality of life to live with T2DM.

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Appendix A: Patient Interview Questionnaire

I would like to ask you about your personal experience of your relationship with your healthcare providers – in the care of your diabetes. Please be comforted that there are no right or wrong answers, and your responses will be kept private. None of your healthcare providers will know what you are telling me. I am interested in understanding your personal views, so please use your own words to answer the questions.

Participants age: _____ Age diagnosed with T2DM: _____ Years with current physician treating T2DM: _____ Gender: _____ Race: _____Ethnicity: _____ Place of residence: _____.

1. How well do you think you manage your T2DM?
2. How long have you been diagnosed with diabetes (T2DM)?
3. Do you have a clear understanding from your healthcare provider(s) to effectively manage your T2DM health care plan? If so, what do you think was the most beneficial learning tool for you?
4. Can you describe the diabetes plan of care prescribed to you by your primary physician in your own words? (Prompts: who educated you, and when was this service given? What types of resources were given to you? Did you go through a DSME education program?)
5. How often do you routinely visit with your healthcare provider? Do you routinely discuss and understand your laboratory results & routine medications during your medical visit? (If no-prompt, what can be done differently?)
6. How much time is allocated to your medical visits by your healthcare provider?

7. What were your thoughts and feelings at that time about the importance of diet in diabetes care?

8. Are you currently on oral medications or insulin-dependent for your T2DM? If insulin dependent – I am going to ask you about insulin, which assists in regulating hormonal balance in your body for the transformation of energy through the use of sugar (glucose)? What was your feeling when you first heard the word insulin? If you are on oral medications - Is it allowing you to control your glucose levels? (If yes-prompt- are you coming to this information to your physician?)

9. The following questions are about the relationship with your healthcare providers. First, what would you say is the importance of the healthcare provider (physician) – patient relationship in medical practice?

10. Why is the healthcare provider (doctor) – patient relationship important to you? (Prompt- Could you give me an example of why this element is important to you)

11. Can you explain how your healthcare provider (physician) communicates with you (the patient) in your own words? (Prompt- Are there additional ways that your healthcare provider communicates with you?)

12. Why is the healthcare provider-patient communication important in effective diabetes care plan?

13. Have you had any challenges or barriers in your relationship with your healthcare providers? (prompt – if yes- Could you explain the challenges or barriers (obstacles/difficulties) that exist in the relationship)

14. What is going well with the PPR relationship?

15. What can be improved to promote a better PPR relationship?

16. Have you considered changing any of your healthcare providers treating your T2DM, and if Yes - why?

17. The following questions are about your medications: What current medication(s) are you taking for your T2DM? (Prompt-did you learn these medications from your healthcare provider or a DSME program?)

18. In what ways are your medications effective or not? (Prompt-Can you site examples of the effectiveness, and if not-how can this be improved through your communication with the PPR?)

19. Have you ever stopped or decreased your medications?

20. If you did ever stopped or decrease/reduce your medications, why? (Prompt- Yes- Was this due to any miscommunication between understanding your medicine or any other related reason?)

21. What are your feelings about the benefits of following strategies recommended by your healthcare provider?

22. Ok, that's it. Is there anything else you would like to tell me about your medical care for your diabetes or about your providers?

Thank you very much for participating in this interview. The next step of this process is for me to listen and transcribe the information from the audio-recording. I will contact you and allow you to review the transcribed information. At this point if you would like to make any changes, we can do so. Please don't hesitate to call me for any future concerns or questions.

Sincerely,

Desiree D. Lacey MPH, RRT, RCP

Walden University Doctoral Candidate

Appendix B: Healthcare Provider Interview Questionnaire

I would like to ask you about your professional experiences of your relationship with your T2DM patients – in the care of your diabetes. Please be comforted, that is no right or wrong answers. I am interested in understanding your personal views, so please use your own words to answer the questions. Please answer the following questions: Participant's profession: _____Specialty: _____ Current practicing credentials/certifications: _____ Years of practice: _____ Practice location site: _____

(1) What is your professional title with the patients?

(2) What is the average length of time you work with diabetic patients?

(3) What services do you provide to the T2DM patient?

(4) How often do you interact with the patient?

(5) Do you directly provide all the care services to the patient, or is it allocated to other team members? (Prompt – if other team members provide additional services)?

(6) What is the length of time the other team members render these services?

(7) Do you feel this is sufficient time to treat and educate the patient? (Prompt- can you give examples of what is working for your medical services or what can be improved?)

(8) Can you describe to me how you communicate with your patient?

(9) Do you (healthcare provider) consider the practice of patient-centered communications to provide care with the values, needs, and preferences (prompt - if not, is there a different style of practice you use)?

(10) Do you think your current practice of care between the patient-healthcare provider relationships is effective? (Prompt-please give examples)

(11) How does your medical practice assist the patient with dealing with perceived health barriers, such as T2DM?

(12) Does your practice have any patient monitoring tools or cues to ensure that PPR relationships have effective communication exchanges that promote effective PPR relationships? (Prompt- If yes, can you give some examples)

(13) What communication tools or resources are used to address effective learning methods for educating your patients on their T2DM care plans?

(14) Do you recommend your patients to attend approved DSME Programs?

(15) How do you monitor if the patients attend DSME programs? (If yes, what are your monitoring tools?)

(16) What are your biggest concerns regarding the therapeutic relationship between patient – healthcare provider you are faced with?

(17) Are you confident that the patient-healthcare relationship is receiving key elements of trust, empathy or honesty level (prompt- if yes- what example can be offered)?

(18) Can you give some examples of communication methods or other alternative methods to improve patient-healthcare providers' trust behaviors? (Prompt -

(19) What is working or not working which could you do better to improve your therapeutic relationship's effectiveness between the patients and healthcare providers?

(20) Do you have anything else you would like to contribute to this interview about the patient-health care provider relationship?

Thank you very much for participating in this interview. The next phase of this process is to listen and transcribe the audio recording of the gathered interview information. I will follow-up with you, a final transcription and allow you to review it, at this point you can make any changes or additions. If any you should have any further questions or concerns, please don't hesitate to contact me.

Sincerely,

Desiree D. Lacey MPH, RRT, RCP

Walden University Doctoral Candidate

Appendix C: T2DM Patient Recruitment Flyer

DIABETES PATIENTS NEEDED FOR RESEARCH INTERVIEW

PERCEPTIONS OF PATIENT–HEALTHCARE PROVIDER RELATIONSHIPS IN THE MANAGEMENT OF TYPE II DIABETES

Conducted: Desiree D. Lacey MPH, RRT, RCP

CRITERIA'S NEEDED TO PARTICIPATE

24 – 75 years' old
Diagnosed with Type 2 diabetes (T2DM)
Covered by health insurance
Participating under the care with a healthcare provider

- Date & times for participating in the study are flexible.
- Each interview will be exclusively set up for each participant's request.
- Each interview can take up 75 minutes. Compensation: All participants will receive a $25.00 Visa Gift Card to compensate for their time.

Appendix D: Diabetes Healthcare Professional Recruitment Flyer

DIABETES HEALTHCARE PROFESSIONALS NEEDED FOR RESEARCH INTERVIEW

PERCEPTIONS OF PATIENT– HEALTHCARE PROVIDER RELATIONSHIPS IN THE MANAGEMENT OF TYPE II DIABETES

Conducted: Desiree D. Lacey MPH, RRT, RCP

CRITERIA'S NEEDED TO PARTICIPATE?

Physicians or other healthcare providers treating diagnosed T2DM patients
T2DM patient are covered under insurance

- Date & times for participating in the study are flexible.
- Each interview will be exclusively set up for each participant's request.
- Each interview can take up to 60 minutes.
- Compensation: All participants will receive a $25.00 Visa Gift Card to compensate their time.