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# Social Workers and Early Intervention with Diabetic Clients

Rievu Agiri  
Walden University

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# Walden University

College of Social and Behavioral Sciences

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Rievu Agiri

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Walden University  
2019

Abstract

Social Workers and Early Intervention with Diabetic Clients

by

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MSW, University of Texas, Austin, 2005

BS, Bowie State University, 1999

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Social Work

Walden University

May 2019

## Abstract

Social workers are uniquely positioned to facilitate early intervention services that minimize the impact and burden of Type 2 diabetes. There is little evidence on the specific role that social workers play in addressing the psychosocial factors that exacerbate the condition or impact treatment outcomes. The purpose of the study was to examine the role of social workers in facilitating early interventions for clients with Type 2 diabetes. The theories of role and organizational systems provided the conceptual framework. Data was collected from interviews with eight participants with Master's degrees in Social Work in a large Southwestern state in the United States. An open coding method analysis was used to identify the themes. The study findings showed that early interventions are scarcely provided in social work services for persons diagnosed with Type 2 diabetes. However, social workers typically assume the role(s) of: educator; resource broker; change agents for clients; counselor; advocate and community change agent, in early intervention services. Recommendations for improving social work early intervention in the treatment of Type 2 diabetes include giving recognition to social workers' position, creating opportunities that foster their ability to deliver that are beneficial to the patients, and providing more experiential-based learning and advanced training in medical conditions. The findings could positively impact social change by providing useful knowledge for social workers, nurses, and other health workers who are searching for direction in decreasing the rising risks for complications, and exacerbation of diabetes.

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## Dedication

This dissertation is dedicated to my 84-year-old mother, Mrs. Esther Okpara; my husband, Pastor Itite Agiri; my daughter, Uriri Bunmi Oni; and my twins, Ese and Isio Agiri. To my mother, who although never attended any formal school yet instilled the importance of higher education in the minds of all her children. Thank you, Mama, for teaching us empathy for others, love, and kindness.

To my husband, Pastor Itite Agiri. I can never thank you enough for your consistent prayers, encouragement, humor, and providing late night snacks! To my 18-year-old daughter, Uriri. Your confidence and intelligence are inspirational, especially during those late nights of helping with proof-reading my assignments and attending to technical computer issues...my inhouse tech support, thanks a million!

To my 10-year-old twin son and daughter, Ese and Isio. Remember I love you both dearly and hopefully you see this work as an inspiration to challenge you to always pursue your dreams.

To my siblings, Mrs. Rachel Agbroko, Rev. Felicia Ono-Sorhue, Mrs. Jomo Edafe, Hon. Kenneth Okpara, Dr. Suvwe Okpara, and Mrs. Paulette Okpara. Thank you all for your unconditional love and consistent prayers.

To my church family Alpha & Omega International Ministries, Austin, Texas and my spiritual mentors, Pastor Solomon and Apostle Esther Agiri, Pastor Wale Odufuye. Words are inadequate to express my gratitude to you all.

Finally, I dedicate this study to the memory of my late elder brother, Venerable Oyovwe Okpara. I know this study will make you proud.

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## Chapter 1: Introduction to the Study

### Introduction

Diabetes is the third leading cause of death in the United States and accounts for 12% of deaths (Stokes & Preston, 2017). Complications associated with diabetes is stroke, renal disease, heart disease, blindness, peripheral neuropathy and lower extremity amputations. Diabetes also contribute to a significant number of deaths in the United States (Chappidi, Shivananjiah, Thirthahalli, Kunnavil, & Murthy, 2017). According to the National Stroke Association (2013) people who have diabetes are two to four times more likely to have a stroke or heart disease at an early age, compared to those without diabetes. As of 2016 almost half of individuals with chronic kidney disease have diabetes (National Institute of Diabetes and Digestive and Kidney Diseases, 2016). This report also indicated that heart disease resulting from diabetes was responsible for 65% of all deaths in people with diabetes. Flaxman et al. (2017) cited a significant increase in the number of persons with diabetes who have experienced vision loss. Gregg et al. (2014) reported there are over 10,000 new cases of diabetes-related blindness among adults per year. Diabetic retinopathy and blindness are also expected to increase (Hwang et al., 2015). Hoffstad, Mitra, Walsh, & Margolis (2015) indicated that lower level extremity amputations are prevalent in as many as 15% of people with diabetes.

Most complications of diabetes are associated with Type 2 diabetes. An estimated 95% of individuals diagnosed with diabetes have Type 2 diabetes (Jain & Raji, 2008). Providing medical treatment and psychosocial support immediately following diagnosis is integral to the successful management of Type 2 diabetes and improving treatment

outcomes (Kadirvelu, Sadasivan, & Ng, 2012). Recently the emphasis has shifted to the use of interdisciplinary teams of health care and human services professionals to provide interventions that holistically address clients' medical and psychosocial needs (Sumpio, Armstrong, Lavery, & Andros, 2010). Social workers are more likely than counselors and other allied health workers to identify patient problems related to adjustment to the illness, treatment, and access to community resources (Fabbre, Buffington, Altfeld, Shier, & Golden, 2011).

The outcomes of this study include enhanced understanding of the physical and psychosocial complications associated with the early onset of Type 2 diabetes. Also included is the generation of knowledge useful for social workers, nurses and other health workers who seek direction in mitigating the increased risks for complications and exacerbation of diabetes, or even deaths. Prior to discussing the findings, background information will provide the foundation and reasons for the appropriateness of this crucial examination.

### **Background**

Diabetes ranks among the most common, costly, and significant health problems worldwide. In 2015 diabetes affected more than 422 million adults globally. This resulted in 1.6 million deaths (World Health Organization, 2017). In the United States over 100 million U.S. adults had diabetes or were prediabetic in 2015 (Centers for Disease Control and Prevention, [CDC], 2017). This condition is one of the leading causes of death worldwide, responsible for chronic conditions including high blood pressure, kidney disease, heart disease, and vision loss (WHO, 2017). The monetary cost of treatment or

care for the most common form (Type 2 diabetes) is estimated at \$245 billion a year. This disease demands long-term, intense, self-management and psychosocial support (American Diabetes Association [ADA], 2015; Pratley, 2013).

In addition to the physical complications associated with diabetes the condition also impacts an individual's concept of self, their social and professional relationships. Persons affected by diabetes are more likely to have low self-concept, low self-esteem, and moderate body image issues (Samadi, Safavi, & Mahmoodi, 2011). As a result, these patients are prone to poor physical and mental health, which further impacts their ability to function independently, develop and maintain good interpersonal relationships, and achieve community integration (Chappidi et al., 2017). Researchers have reported that persons diagnosed with diabetes may become emotionally and psychologically overwhelmed, leading to diminished self-care, worsened glycemic control, increased risks for complications, and an exacerbation of the condition in the long run (Altfeld, Pavle, Rosenberg, & Shure, 2013; Pratley, 2013).

Due to the chronic nature of diabetes patients also experience enormous changes in their social and economic quality of life. Scholars report that individuals with diabetes are at high risk for psychiatric illness. This further impacts problems with family life, social interactions, and work (Samadi et al., 2011), while (Altfeld et al., 2013) note that family members were often required to make changes to their lifestyle following the diagnosis of a loved one with the condition. Diabetes also contributes to work loss and health-related work limitations (ADA, 2015), which may prevent affected individuals affected from working, impair their productivity, or increase absenteeism.

## **Early Intervention in Diabetes Treatment**

Early intervention, ideally immediately after diagnosis, is recognized as an important strategy to minimize the impact and burden of diabetes (Pratley, 2013). This is crucial, considering that complications associated with Type 2 diabetes start to develop at the early stage of the condition (Young-Hyman et al., 2016). Complications associated with diabetes are also connected to psychosocial problems and a lack of access to community resources (Altfeld et al., 2013). Psychosocial factors, such as lack of finance, living conditions, social support, employment status, and access to community services, can impact the ability of persons with diabetes to effectively manage their conditions (Altfeld et al., 2013); a continued consideration of these factors is therefore, critical to patient care. Addressing these issues empower the client with needed resources, support and the tools to engage in successful self-management.

With many chronic health conditions, there is a need for patients to be knowledgeable about their role in securing better quality of life. It is equally important for such individuals diagnosed with Type 2 diabetes to be familiar with community resources so that they can advocate for, or access available support or address information gaps. In the same regard, as patients become more knowledgeable about their conditions, they are more likely to act responsibly (Pratley, 2013). Following initial diagnosis, there is ample opportunity to support individuals with diabetes and their families; unfortunately, needs are often ignored and not met with the necessary support, such that complications emerge that often lead to morbidity (Papaspurou et al., 2015).

## **Social Workers and Early Intervention in Diabetes Treatment**

Social workers, compared to other health and human service workers, may be uniquely positioned to facilitate intervention services in the care of clients with diabetes and to comprehensively address their medical and psychosocial needs, given their distinct ability to link clients to health and community services (Fabbre et al., 2011). Amid the chaos and confusion following a diagnosis for chronic illness, including diabetes, social workers can provide information and expertise that links clients and their close family members with vital resources. Social workers are also trained to conduct comprehensive biopsychosocial assessments on individuals with chronic illnesses that are incorporated into clients' care plans (National Association of Social Workers [NASW], 2016). The NASW (2016) Standards for Social Work Practice in Health Care Settings state that:

“The early identification of psychosocial issues can assist health care social work staff in effectively prioritizing situations that may affect client safety or indicate a high need for social work services . . . the foundation of client care planning is the comprehensive assessment, which requires social workers to engage clients in identifying their needs and strengths and supporting clients in establishing priorities and goals.” (p. 25)

Social workers also listen to clients' concerns and provide emotional and psychological support (Fabbre et al., 2011). Such services and support may enhance the ability of persons with diabetes to adjust to the unique impact the disease exerts on their health and circumstances. The importance of social workers in diabetes management has been noted in the literature; Ciporen (2012) examined the role of social workers in

combating Type 2 diabetes and found that social workers facilitate meaningful medical, educational, and psychosocial interventions to foster needed lifestyle changes and improve the overall wellbeing of clients. Rabovsky et al. (2012) also assessed the content and outcomes of social workers working with clients with diabetes. Their results showed that social workers most often assisted patients with diabetes in obtaining medications or health insurance.

Despite these findings, diabetic patients continue to have poor outcomes that are linked to a lack of receiving early intervention services (Due-Christensen, Zoffmann, Willaing, Hopkins, & Angus Forbes, 2017). However, there are no current studies that have interrogated the role of social workers in early interventions with clients with Type 2 diabetes. In this study, I addressed the gap in knowledge by examining the role of social workers in facilitating early interventions that target self-management, linkage with community organizations or resources, and problems with emotional and social support for clients with Type 2 diabetes. In this study, I also focused on identifying ways that social workers may be engaged more effectively, to improve medical social work practice with diabetic clients.

### **Problem Statement**

Diabetes is identified as a significant burden in public health. Approximately 86 million American adults have been diagnosed as being prediabetic (Towne et al., 2017). Previous researchers reported that some clients are likely to progress from a prediabetic state to a complicated Type 2 diabetes state even while under expert medical care (Danish & West, 2005; Due-Christensen et al., 2017). Adverse or negative treatment outcomes



have been tied to the lack of provision of essential early intervention services that target self-management, linkage with community organizations or resources, and problems with emotional and social support (Due-Christensen et al., 2017). Social workers are well known for providing early intervention services to children, young adults, and families (Devine, 2015; Mahoney & Wiggers, 2007). The problem being addressed has been described in the following manner, “although there are probably many social workers treating and researching diabetes their involvement seems inconspicuous” (DeCoster, 2001:26). The psychosocial needs of diabetic clients are not often sufficiently addressed because social workers are not fully engaged as part of an interdisciplinary treatment team (Barber, Coulourides Kogan, Riffenburgh, & Enguidanos, 2015).

There is a dearth of information regarding the role social workers play as members of treatment teams tasked with implementing early interventions when working with persons with Type 2 diabetes. In this study, I examined social workers’ experiences in the diabetes treatment center in hospital settings to gain an understanding about the role, attitudes, and training needed for facilitating early interventions. I also explored ways in which social workers can be engaged more effectively, to improve medical social work practice with diabetic clients.

In searching the Walden University Library, Google Scholar, PubMed, Medline and Ebscohost, I found no new studies that addressed the role of social workers in early intervention services with diabetic clients that target self-management, linkage with community organizations or resources, and problems with emotional and social support. However, in a related study, Rabovsky et al. (2017) examined the content and outcomes

of social work consultation for patients with diabetes in primary care, using a retrospective design to analyze the electronic medical records of 977 patients. The results of their study revealed that, relative to the role of a social worker in addressing the needs of patients with diabetes, most social workers often address the social gradient and social support categories. These include services that target factors that contribute to health; economic and social inequalities (i.e., racial, gender, and age discrimination); and access to resources and support (Rabovsky et al., 2017). However, the authors did not directly focus on early interventions and, thus, a gap still exists in the literature.

### **Purpose of the Study**

The purpose of this study was to explore social workers' experiences in working in diabetes treatment centers in hospital settings, to gain empirical understanding about the role, attitudes, and training needed for facilitating early interventions. I explored ways in which social workers can be engaged more effectively to improve medical social work practice with diabetic clients. In managing diabetes, the psychosocial needs of clients are not often sufficiently addressed (Chew, Shariff-Ghazali, & Fernandez, 2014). Individuals with limited access to resources, opportunities and support need interventions that aid them in managing, adjusting to, and reducing the progression of their diabetes. Social work support is necessary, to address the emotional and social well-being of the diabetic patient. Additionally, early intervention has been considered as a viable strategy to minimize the impact and burden of the disease (Bergman, 2013). However, little empirical information exists on the role of social workers in facilitating early interventions that target self-management, linkage with community organizations or

resources, and problems with emotional and social support for clients with Type 2 diabetes. Early intervention is vital to the diabetes disease management process and in achieving successful treatment outcomes (Bergman, 2013), particularly as many patients become disengaged in the diabetes self-management or treatment process immediately after diagnosis over a lack of psychosocial support and an inability to access resources to address their needs (Chew et al., 2014).

Psychosocial support is defined as continuous environmental, social, behavioral, and emotional support that enables individuals with diabetes to cope with and manage the disease (Chew et al., 2014; Young-Hyman et al., 2017). The presence of knowledgeable professionals, such as social workers, who can provide specialized guidance and support can enhance early intervention efforts focused on addressing challenges that are inherent in the disease management process. Understanding the role of social workers in early intervention with clients with diabetes helps to uncover their specific responsibilities and expectations in the patient care process. Such knowledge provides insights as to whether social workers' current capabilities are commensurate with the extent of their responsibility in early intervention programs for clients with diabetes. More importantly, an understanding of how social workers interpret and respond to their role in early intervention with patients translates to an increased comprehension of the personal, interpersonal, and contextual factors that impact their work attitude and behaviors. Additionally, such knowledge could be incorporated into social work, educational or work place training programs. to improve treatment outcomes for clients with diabetes.

### **Research Questions**

I developed the following research questions for this study:

Research Question 1: What is the role of social workers in medical social work in facilitating early interventions for clients with Type 2 Diabetes that target self-management, linkage with community organizations or resources, and problems with emotional and social support?

Research Question 2: How could social workers be engaged more effectively to improve medical social work practice with diabetic clients?

### **Theoretical Framework**

The theoretical framework for the study was role theory. Role theory focuses on the study of behaviors that are characteristic of persons within contexts and with various processes that presumably produce, explain, or are affected by those behaviors (Major, 2003). A summary of Biddle's (1986) perspective of this theory also espouses that roles have duties, expectations, norms, and behaviors of the individual who occupy them. Biddle noted that: "persons are members of social positions and hold expectations for their own behaviors and those of other persons" (p. 67).

As applied in this study, the role theory framework provided a useful tool for identifying, understanding, and managing the role demands of social workers in early interventions with persons with diabetes. Failure to understand the expectations and duties that are typical for a job role would impact performance and results (Biddle, 1986). Therefore, role theory is a suitable perspective from which to assess the extent to which social workers determine client expectations, and their organizations can provide early

intervention to enhance the ability of persons with diabetes to successfully adjust to the demands of their conditions and achieve a better overall quality of life.

Another theoretical model relevant to addressing the topic of this study was systems theory. Systems theory originated with the study of biological systems, by scholar Von Bertalanffy, whose general system theory explores the abstract organization of phenomena, principles common to them, and models that can be used to describe them (Mele, Pels, & Polese, 2010). As applied in the present study, systems theory provided a basis for ascertaining and explaining medical social work services for persons diagnosed with diabetes. In my professional career as a social worker, I frequently observed that often, a team of professionals, with support from community-based organizations is at the forefront of interventions or treatment provided to diabetic patients. The complex web of interconnections required in the treatment of individuals with diabetes creates interdependencies that have implications for the role and functions of social workers. These interconnections often influence the challenges and barriers that clients face in receiving early intervention measures. In addition, McGill et al. (2017) found that interdisciplinary treatment efforts focused on “building capacity,” “adhering to the treatment,” and “self-management” is critical to holistic diabetic management (p. 12).

### **Nature of the Study**

This research study adopted a qualitative perspective, via individual interviews for data collection. According to Sullivan and Sargeant (2011), “qualitative approaches are used when the potential answer to a question requires an explanation, not a straightforward yes/no . . . and is concerned with the point of view of the individual under

study” (p. 449).

The interviews helped create a body of work that provides a baseline analysis of what service providers perceive as their role in early intervention with clients with diabetes. Ponterotto (2010) suggested that a sample size of five to 25 participants who have direct experience with the phenomena under consideration is enough for a qualitative study – this research was based on interviews with eight social workers currently working with diabetic individuals.

To obtain the required sample, I used a purposive sampling design to select social workers that were representative of the population under consideration (Strauss & Corbin, 2007), also considering that Teherani et al. (2015) pointed out that the overall purpose of using purposive sampling is to select only individuals and settings that purposefully provide an understanding of the phenomenon under investigation. Snowball sampling and direct contact with subjects was also used to recruit participants for the study. This technique or approach, also known as chain sampling, involves recruited participants recruiting peers and close acquaintances to participation in a study (Heckathorn, 2011).

The selected perspective for the study was an interpretive-constructivist research paradigm. According to Morrow (2007), an:

*“Interpretive-constructivist paradigm assumes that there are multiple socially constructed truths, and that no one single reality or universal truth exist. People construct, interpret and attribute different meanings, based on the interactions with the physical and social world. Thus, (the) researcher’s subjectivity is an*

integral part of the research” (p. 213).

### **Definitions**

*Biopsychosocial model:* A model of health that believes that illness and health result from interactions between biological, psychological, and social factors (Sverker, Östlund, Börjeson, Hägerström, & Gåfvvels, 2017).

*Chronic disease:* A disease that is incurable and requires medical treatment and support from health and human service workers over a long period of time (“Chronic disease,” 2011).

*Diabetes (diabetes mellitus):* A disease in which the body’s ability to produce or respond to the hormone insulin is impaired, resulting in abnormal metabolism of carbohydrates and elevated levels of glucose in the blood and urine (“Diabetes,” 2011)

*Early interventions:* Psychosocial support services that are provided immediately after diagnosis that reduces the complications with the condition and enhances overall functioning (Pratley, 2013).

*Hospital:* A health establishment that caters to the medical, surgical, and nursing needs of injured and sick individuals (“Hospital,” 2016).

*Interdisciplinary treatment team:* A group that consists of specialists and professionals from several fields combining skills and resources to provide treatment or services to a patient (Nancarrow et al., 2013).

*Psychosocial support:* Psychological and social support provided to an individual in distress, or need, which facilitates physical and mental wellness and increases their ability to reduce the negative impact associated with their conditions, prevents distress

and suffering, improves functioning, and increases the ability to cope better and achieve community integration or independence (Altfeld et al., 2013).

*Role:* A set of enduring behaviors that pertains to a task, position, or social function, as well as the shared expectations regarding the behaviors that the occupant of a certain position should show (Daniel, 2010). The significance of examining the roles of social workers is to establish expectations concerning specific behaviors within a given context. For social workers with jobs in treatment teams in hospitals, there are certain duties, expectations, norms, and behaviors expected, by their position. Failure to understand the expectations and duties would, therefore, impact performance and results. Understanding the expectations and duties of social workers' roles in the treatment team could enhance the ability to successfully facilitate early intervention services for clients with Type 2 diabetes (Daniel, 2010).

*Social worker:* A graduate level trained professional who that assists individuals, families, groups, and communities to enhance their psychosocial wellbeing by developing skills and their ability to use their own resources and those of the community to resolve problems (NASW, 2016)

*Social workers early intervention:* Services that are provided by social workers for individuals diagnosed with a chronic health condition, immediately following diagnosis of the condition that target the facilitation of self-management, linkage with community organizations or resources, and provision of emotional and social support. These intervention services are especially useful for delaying the progression or escalation of diagnosed health conditions. More importantly, early intervention services



also enable an individual with a diagnosed chronic illness to learn more about the condition, gain information about available resources, and develop the necessary capacity to manage their health condition (Pratley, 2013).

*Type 2 diabetes:* A common form of diabetes mellitus that develops especially in adults and most often in obese individuals and that is characterized by hyperglycemia resulting from impaired insulin utilization coupled with the body's inability to compensate with increased insulin production. The condition is also called also non-insulin-dependent diabetes, non-insulin-dependent diabetes mellitus, and Type 2 diabetes mellitus ("Type 2 diabetes," 2011).

### **Assumptions**

Assumptions are those factors presumed, but not proven to be true, often used only temporarily or for a specific purpose, such as building a theory; are necessary as the foundation of the research; and serve as the conditions under which statistical techniques yield valid results (Wargo, 2015). Simon and Goes (2011) also described assumptions as factors that are somewhat beyond the control of the researcher but are relevant to achieving the purpose and objectives of the study. To add the standpoint of Leedy and Ormrod (2010): "assumptions are so basic that, without them, the research problem itself could not exist" (p. 62).

In this study, I made several assumptions about the research process and methodology. First, I assumed that participants answered the interview questions in an honest and candid manner. To achieve this, participants' anonymity and confidentiality were preserved, by ensuring that personal identifying information was not collected.

Second, it was assumed that participants had a sincere interest in participating in the study and were not motivated or influenced by some benefit. Also, participation was voluntary, such that participants were informed and assured that they may withdraw from the study at any time and with no ramifications. Third, relative to inclusion criteria of the sample, I made efforts to ensure the approach that was used in selection was appropriate to the research design and objectives. Therefore, only social workers with experience working with patients with diabetes were considered for participation. Lastly, I assumed that the social workers' role in diabetes treatment and interventions is significant in many health care settings such as hospitals.

### **Scope and Delimitations**

In this study, I explored and described the role of social workers in early intervention with clients with diabetes – its sample demographic covered social workers employed in hospitals in a large Southwestern state of the United States.

The scope of this study was restricted to only social workers employed in hospital settings that provide services to persons diagnosed with diabetes; those that worked in other service settings and not directly work with diabetic patients were excluded.

Although the study was delimited to only social workers employed in diabetes treatment centers at the hospitals in the selected State, I enhanced the transferability of the results by providing detailed steps in the data collection and analysis. Also, rich and thick descriptive information (i.e., participants' direct quotes from the transcripts) will be presented in the results section of the study to permit readers to draw their own conclusions about the transferability of the findings.

### **Limitations**

One limitation of the study design was the subjective nature of the responses. Participants may have responded in a socially desirable way or inaccurately self-reported information. Additionally, it was difficult to accurately assess participants' motivations for participating in the study. As a result, no financial incentive was provided to interested participants. Another limitation was the sample size, which affects the generalizability of the results to the population of social workers employed in hospitals in the United States. To address this, I recruited and interviewed participants until a point of saturation or redundancy was achieved.

Given that this was a qualitative study, there were also limitations related to the transferability of the results because the experiences and perspectives of participants may have differed significantly due to personal and environmental factors. For instance, the differences in the number of years and level of experience in working with persons with diabetes could have also affected perceptions of work roles. To address this limitation, I will clearly state every process or step utilized in the collection and analysis so that other researchers may be able to draw their own conclusions.

Finally, differences in hospital policies and procedures relating to the treatment of persons with diabetes could have also impacted respondents' views. Given that I have prior experiences in facilitating services for clients with diabetes in hospital settings, I may have had some inherent biases and presumptions about early intervention services that are currently available. I tried to remain aware of my biases during the interviews and to prevent them from influencing any of the responses of the participants. I also kept

a journal to record my experiences, my thoughts, and sometimes behaviors during the data collection and analysis.

### **Significance**

Early intervention is vital to the diabetes disease management process and in achieving successful treatment outcomes. Many people with diabetes become disengaged in the diabetes self-management or treatment process immediately after diagnosis because of a lack of psychosocial support and an inability to access resources to address their needs (Chew et al., 2014). The presence of knowledgeable professionals, such as social workers, who can provide specialized guidance and support can enhance early intervention efforts focused on addressing challenges that are inherent in the disease management process. Understanding the role of social workers in early intervention with clients with diabetes helps to uncover their specific responsibilities and expectations in the process. Such knowledge provides insight as to whether their current capabilities are commensurate with the extent of their responsibility in the early intervention with clients with diabetes. More importantly, an understanding of how social workers interpret and respond to their role in early intervention with clients with diabetes translates to an increased understanding of the personal, interpersonal, and contextual factors that impact their work attitude and behaviors. Additionally, such knowledge can be incorporated into social work educational or work place training programs to improve treatment outcomes for clients with diabetes.

The results of this study also make a significant contribution to the social work literature by including previously unexamined phenomena. To date, the role of social

workers in early intervention with diabetic clients has received little empirical investigation in the social work research (Devine, 2015). Therefore, the findings of this study contribute by providing information and guidance on social workers' role in early intervention with clients with diabetes. The potential implications for positive social change include a better understanding of the physical and psychosocial complications associated with the early onset of Type 2 Diabetes. Associatively, the implications also include the generation of knowledge useful for social workers, nurses, and other health workers who are searching for direction in decreasing the increased risks for complications and exacerbation of diabetes.

### **Summary**

In Chapter 1, I provided an overview of the incidence and impact of Type 2 diabetes as well as the importance of understanding the role that social workers play in early intervention with clients with Type 2 diabetes. The chapter contained the background to the problem, problem statement, purpose, research questions, nature of the study, definitions of terms, assumptions, scope and delimitations, limitations, and significance of the study. Chapter 2 will be a literature review of previous research into the incidence and impact of Type 2 diabetes. The chapter will also contain an exploration of the personal and environmental factors that significantly worsen the disease burden. In the literature review, I will also emphasize the role of social workers as members of treatment teams in healthcare, early intervention, linkage with community organizations and resources, and difficulties with emotional and social support.

## Chapter 2: Literature Review

### Introduction

Adverse or negative treatment outcomes have been linked to the lack of provision of essential early interventions services that target self-management, linkage with community organizations or resources, and problems with emotional and social support (Due-Christensen et al., 2017). Although social workers are well-known for providing early intervention services to children, young adults, and families (Devine, 2015; Mahoney & Wiggers, 2007), the role that social workers play in diabetes treatment teams in hospital settings to facilitate early interventions for clients with Type 2 diabetes is still largely unexplored in research studies (DeCoster, 2001). Specifically, a gap exists in knowledge that pertains to the specific early interventions that target self-management, linkage with community organizations or resources, and problems with emotional and social support. The purpose of this study was to explore and describe the social workers' role in early intervention with clients with diabetes.

This chapter will contain a review of the literature on social workers and early intervention with diabetic patients. First, I will describe the literature search strategy used in completing the literature review. This will include a description of the search process as well as the specific search terms that were used to identify germane scholarship. Second, the theoretical foundation for this study will be examined. Third, the conceptual framework guiding the study will be described. Fourth, I will provide an exhaustive review of the current literature on the key concepts and variables. Specifically, I will provide a review of the incidence of Type 2 diabetes and common psychosocial and

resources needs of clients with the condition. In this section, I will also focus on how personal and environmental factors significantly impact the way the disease affects those who have been diagnosed as having the disease. To explore the association between social work support services and diabetic clients, I will provide information about the role social workers play as part of treatment teams in health care settings. The last section will contain a discussion of previous studies that have examined the role of social workers in early intervention services with diabetic clients that target self-management, linkage with community organization or resources, and problems with emotional and social support.

### **Literature Search Strategy**

I conducted an extensive search of the extant literature using the electronic databases accessible through the Walden University Library and Google Scholar. Using the Walden University electronic library link, I conducted a search for databases related to the topic under consideration, specifically because research articles, dissertations, and related studies from the social sciences and health and medical sciences are comprehensively indexed in this system. It was also my preferred system because of the electronic citation tracking and reference checking features. The use of several databases also eliminated problems related to bias and ensured that my search was exhaustive.

The key search terms used for the search were *Type 2 Diabetes, hospitals, social workers, early intervention self-management, community organizations or resources, and emotional and social support*. I first conducted the literature search using Google Scholar with a focus on articles on social workers and early intervention with persons with diabetes. Papasporou et al. (2015), Rabovsky et al. (2017), and Shaw, Brown, Khan,

Mau, and Dillard (2013) served as foundational articles. Based on these foundational articles, related documents were subsequently located using the electronic links for each of the databases. The search query resulted in 650 research articles/citations, which I reviewed for topical relevance. In the end, most of these references were excluded because they were not directly related to the topic under consideration. Others were excluded based on the age of the article (my focus was on relevant articles published from 1980 to the present). My literature search continued until references were redundantly identified.

### **Theoretical Foundation**

#### **Role Theory**

Role theory was first introduced in the 1900s but gained prominence through the works of its early proponents such as Mead, Parsons, Linton, and Moreno (Hindin, 2007). Since its development, the theory has attracted a lot of research interest and has been widely used in different fields of human endeavor. The view of early proponents of role theory was that individuals in social settings engage in predictable behaviors (based on the social parts), much like actors in theatres (Hindi, 2007). A contrasting viewpoint provided by other authors, such as Gross, Sherif, Kahn, Hughes, and Newcomb, believes that roles are behaviors that are characteristic of a social position (Biddle, 1986). Others believe that roles are shared expectations concerning the behaviors of the holder of a social position (Hindin, 2007; Joo, 2012; van Wormer, Besthorn, & Keefe, 2007). Scholars in social work have historically used role theory to explain human interactions with others in social environment (van Wormer et al., 2007). Role theory provides a



theoretical lens with which to study and describe the direct and indirect influences of the social environment on the individual (Joo, 2012).

Role theory posits that human beings in organizations accomplish their work through roles (Joo, 2012). Roles are a set of expected or predictable behaviors that reflect the position, social identity, and the situation of the position holder (Biddle, 1986). Role theorists also believe that human behavior differs from one context to another, based on the behavioral expectations of the position holder and others within that context of the social position (Hindin, 2007; Joo, 2012). Social work has historically focused on person-environment interactions, which is congruent with role theory (Thompson & Greene, 2009) and relative to this study, where the focus is social workers' alignment and performance within the interdisciplinary treatment team. Role theory could provide insight into the knowledge, skills, and competencies that social workers possess or display when working with persons diagnosed with diabetes. Its applications also cover how social workers provide intervention services to persons diagnosed with diabetes and master the therapeutic techniques utilized with the clients.

More importantly, given that role theory focuses on relationships, its use can help to unravel the assumptions social workers have, about their social identities as members of hospital interdisciplinary treatment teams. According to Montgomery (1998), individuals who have sustained and long-term interactions with others tend to make assumptions about their own and others' social identities based on shared expectations of appropriate behaviors. Failure to understand the expectations and duties that are typical for a job role, therefore, would impact performance and results as well as social relations.

Some important concepts of role theory that were identified and especially useful for guiding this study included role ambiguity, role distance, role confusion, role strain, role conflict, and role embracement.

**Role ambiguity.** This occurs when behavioral expectations associated with a given role are unclear and/or incomplete such that the incumbent lacks enough guidance on what to do or how to do it (Biddle, 1986). It often creates stress and leads to increased anxiety, tension and depression (van Wormer et al., 2007). Role ambiguity also impacts role performance, engagement, and job satisfaction (Toi, 2015). As members of interdisciplinary treatment teams, social workers typically experience contrasting role expectations, which is characteristic of role ambiguity (Fogler, 2009). Social workers who are part of an interdisciplinary treatment team may have other professionals that perform parallel functions that are typical to the role of the social worker (e.g., rehabilitation counselors) or may be assigned roles that may not have clear guidance on what is required when it comes to providing services to clients.

**Role distance.** The extent to which social workers distance themselves from their putative role as it pertains to their obligations towards the client may impact outcomes that they achieve with clients (Joo, 2012). Role distance is evident when a social worker loses sight of their professional role and the expectations thereof and could seem to be doing their job but may be professionally detached. It is also present when a social worker deliberately controls and limits the extent to which they carry out the job obligations to the client, resulting in a significant discrepancy in the actual performance of the obligations. The concept of role distance provides a sociological means of

understanding the type of divergence between social workers' obligation and actual performance.

**Role confusion.** Sometimes social workers may have difficulty in determining which role to assume when they are working as members of an interdisciplinary team and when they are required to “wear many hats” in the daily discharge of their duties, where they often wear many professional hats such as *problem solver*, *resource broker*, *advocate*, or *therapist* (NASW, 2016). Given the multiplicity of the roles, social workers may sometimes find it difficult to determine how (i.e., in what capacity or role) they should act towards the client.

**Role strain.** Role strain refers to the felt difficulty in fulfilling role obligations (Cox & Steiner, 2013). It occurs when expectations may be beyond what the individual may be able to achieve or pushes the individual beyond the limits of their abilities. Social workers working in hospitals, schools, the military, and prison have often reported experiencing significant role strain due to conflict between agency policies and regulations and their professional value orientations (Johnson, 2008). Some social workers often feel trapped between discrepant role expectations and see themselves as a *resident guest* (Pollock, 2013).

**Role conflict.** Role conflict occurs when people experience tensions as the result of incompatible demands in the performance of their designated roles (Cox & Steiner, 2013). It may also result from incongruent values systems (i.e., between organizational role expectations and an individual's value system). Negative impacts of role conflict

include job stress, decreased job satisfaction, and dysfunctional coping behaviors (Biddle, 1986; Cox & Steiner, 2013).

**Role embracement.** Role embracement is the complete adoption of a role such that the self disappears completely into the role (Toi, 2015). Characteristics of role embracement include: (a) an expressed attachment to the role, (b) a demonstration of qualifications and capacities for performing it, and (c) an active engagement or spontaneous involvement in the role activity at hand (i.e., a visible investment of attention and muscular effort; Toi, 2015). Social workers that have embraced their job roles exhibit behaviors and attitudes that intimately reflect the expectations concerning the attitudes and behaviors of occupants of the role.

### **Systems Theory**

The origins of systems theory have been attributed to various scholars, depending on the field of study based on their contributions to the development of its diverse perspectives. Notable among them are Von Bertalanffy, Buckley, Miller, Mesarovic, Wymore, Parsons, Luhmann, and Lazlo (Adams, Hester, Bradley, Meyers, & Keating, 2013). In the social sciences, the works of scholars such as Parsons, Spencer, and Durkheim have been credited as significantly contributing to the development of the theory (Mingers, 2014). Although systems theory lacks a universally agreed upon school of thought, there is a basic agreement that it focuses on holism and interconnections (Adams et al., 2013). In a broad sense, social systems theory emphasizes that a complex web of interconnections creates interdependencies that have implications for the role and functions of an individual within an environment (Mingers, 2014).

Systems theory is useful for developing a broad view of individuals within an environment, especially in situations where several systems inextricably connect and influence one another. It also provides a template with which to assess and understand how the relationships and influences within and outside the service delivery environment continually shape the role of social workers. The theory is also useful in circumstances where contextual understandings of behavior lead to the most appropriate practice interventions. Therefore, systems theory was useful for providing an explanation of the role of social workers in interdisciplinary teams in hospitals as well as the specific roles that connect the social worker to several interrelated systems in a given environment.

### **Incidence of Type 2 Diabetes in the United States**

According to the ADA (2015), approximately 90% to 95% of all reported diabetes cases are Type 2 diabetes. Type 2 diabetes is a chronic metabolic disorder characterized by high levels of sugar in the blood and inadequate production of insulin or resistance to insulin (Harrison, Falvo, Weiss, & Holland, 2017). Researchers (i.e., Kadirvelu et al., 2012; Pratley, 2013; Tuomilehto & Schwarz, 2016) all agree that the burden of Type 2 diabetes is significant, in terms of medical care, comorbidity with other chronic medical conditions, and death. Chronic health conditions associated with, or that coexist with, Type 2 diabetes include stroke, kidney damage, vision loss, and heart disease (Paneni, Beckman, Cosentino, & Creager, 2013). Flaxman et al. (2017) reported that there has been a significant increase in the number of persons with diabetes who have experienced vision loss. Also, in 2015, diabetes was the seventh leading cause of death in the United States (ADA, 2015). Factors that have been known to contribute to Type 2 diabetes

include obesity, poor nutrition, the human environment, and living a sedentary lifestyle (Paneni et al., 2013).

The CDC (2017) reported that Type 2 diabetes is more common among adults aged 45 to 64 years, Native Americans, Blacks, Hispanics and persons with less than a high school education. Additionally, individual and neighborhood socioeconomic factors were also related to the incidence and prevalence of the condition. Krishnan, Cozier, Rosenberg and Palmer (2010) examined the relationship between socioeconomic status and incidence of Type 2 diabetes among women aged 21–69 years. The results of the study indicate that both individual and neighborhood socioeconomic status factors play a role in the development of diabetes in Black women. Also, lower individual levels of education and income and lower levels of neighborhood socioeconomic status were independently associated with an increased risk of Type 2 diabetes.

Research indicates that older adults are more at risk for developing diabetes, due to anatomical and physiological changes resulting from the normal aging process (Menke, Casagrande, Geiss, & Cowie, 2015). Among young adults, Type 2 diabetes is prevalent among persons that are obese, as well as those with a family history of the condition (CDC, 2017); the same is the case for children. Interestingly, the patterns of rates of prevalence of Type 2 diabetes present in adult populations are also reflected along racial and ethnic lines in young adults and children. For instance, although diabetes is a rare medical condition for children of all racial and ethnic backgrounds, there are higher rates of the disease in many minority groups, compared to Caucasians (CDC, 2017).

### **Psychosocial Needs, Resources, and Diabetes Management**

Type 2 diabetes is a complex health condition with acute and chronic complications that impact the overall physical, mental, and social functioning of the individual. Papasporou et al. (2015) conducted a qualitative study using a semi-structured interview to examine the fears and health needs of persons diagnosed with Type 2 diabetes. Participants for the study were 15 (nine women and six men) insulin-dependent patients in central Greece. The results showed that patients with diabetes are exposed to a variety of fears and needs related to the diagnosis, treatment, expected impacts, prognosis and the daily management of the disease. Specifically, patient fears were linked to long-term complications and the effects on their quality of life. In another study, O'Neill and Evans (1998) appraised the social, psychological, and health needs of persons with Type 2 diabetes using three focus groups comprising individuals aged 55-65 years. Their results concluded that most participants knew little about diabetes at diagnosis, and scant knowledge about their condition, its side effects and complications. Also, patients had significant fears and worries about resource availability, and coping with the condition. Participants in the study expressed that their diabetes made them feel depressed, anxious, irritable and fearful (O'Neill & Evans, 1998).

Shaw et al. (2013) explored the perceived psychosocial needs and barriers to management of diabetes among America Indians/Native Alaskan adults with Type 2 Diabetes receiving care at the Alaska Native Primary Care Centre, using three focus groups and five interviews with 13 American Indians/Native Alaskan adults with Type 2 diabetes. Participants reported knowledge and education about diabetes, social support

from other people with diabetes, spirituality, and self-efficacy, as resource needs. In terms of roadblocks, self-reported lack of knowledge about nutrition and diet, social difficulties caused by dietary restrictions, and co-morbid medical conditions were identified as factors that are perceived by participants to have a negative impact on the management of diabetes.

In a more recent study, Due-Christensen et al. (2017) examined the process of adaptation, following a new diagnosis of Type 1 diabetes in adulthood. They empirically concluded that disruption, constructing a personal view of diabetes, reconstructing a view of self, learning to live with diabetes, and behavioral adaptations are common processes of adaption to Type 1 diabetes. The results emphasized the need for professional interventions and support that facilitates the adaptation process and improve treatment outcomes. Examining the influences of social issues on diabetes self-management, Akhter, Turnbull, and Simmons (2016) found that housing problems, illiteracy, unemployment, lack of funds, inadequate social support systems, social stigma, and lack of knowledge about community resources were quite common among persons affected by the condition. Other issues include problems with coexisting health and mental health conditions, with personal and environmental factors cited as worsening the impact and burden of the disease. Some respondents stated that personal challenges, such as losing a partner or divorcing, significantly impacted diabetes self-management.

Wilkinson, Whitehead, and Ritchie (2013) conducted a systematic literature review of factors influencing the ability to self-manage diabetes in adults living with Type 1 or 2 diabetes. Of 37 qualitative studies reviewed, common factors identified



include communication, education, and personal factors. With respect to internal factors, individual adaptability, personal beliefs, psychosocial factors, physical symptoms or comorbidities, learning experiences and resource limitations impact ability for self-care. Collectively, these studies indicate that persons diagnosed with Type 2 diabetes often have a plethora of needs, depending on the sociodemographic characteristics of the individual and the immediate environment.

### **Social Workers and Support Services in Hospital Settings**

Social workers serve as liaisons between patients or clients in interdisciplinary teams in hospitals, other health care settings, and human service agencies. In health care settings, social workers often focus on identifying and facilitating clients' psychological, psychosocial problems, and resource needs (Zimmerman & Dabelko, 2007). Social workers encounter clients with chronic health conditions in various health care settings; the diagnosis and living with a chronic disease often creates psychosocial distress, depression, anxiety, anger, and other conditions in clients (Wilkinson et al., 2013). Social workers are usually employed to work in specific medical units in hospitals such as emergency/trauma, transplant, oncology, nephrology, and pediatrics (Craig & Muskat, 2013). Aside from addressing clients' needs within each of the units, social workers also orient other members of the treatment team to the social and emotional aspects of a patient's illness (Ambrose-Miller & Ashcroft, 2016). Findley (2014) examined social work practice amid chronic illness and disability and concluded that social workers are not specifically mentioned in most chronic care models. It was noted, however, that the health and social care processes can become complicated, if the individual has barriers to

partnering roles necessitated by chronic care models. Thus, the role for the social worker should be more clearly defined. Mann et al. (2016) interrogated the role of social workers as behavioral health consultants in primary care settings, determining that social workers are especially suited to being leaders in the integration of health care for many chronic health conditions. Specifically, the biopsychosocial approach taken by social workers allows them to see the whole person, which leads to a consideration of not only physical health, but also its intersection with mental and social conditions that affect the overall well-being of an individual.

Sverker et al. (2017) stated because clients' problems derive from a mix of social, psychological and medical challenges, social workers in health care settings collaborate with clients to address personal, psychosocial, and environmental factors that result from, or exacerbate the health and social condition of patients. Social workers also focus on assisting the patient to seek out existing strengths and resources to deal with the condition. This includes providing information and support that links clients to family and friends, community agencies that provide physical resources such as medication, counseling, food, shelter and other resources.

Craig and Muskat (2013) examined the self-described role of social workers in hospital settings, recruiting participants from multiple hospitals, through contact with social work practice leaders. Seven focus groups were facilitated in seven different settings, with the results showing that the social workers' role in health care settings generally involve specific tasks such as assessment, case management, advocacy, delivering interventions, and administration. Additionally, the study also found that social

workers employed in health care settings also serve in the role of mediator or arbitrator, team member and facilitator, critical links and brokers of information to families and services, and resource advocate. The findings of this study therefore indicate that, although social workers may be assigned to different departments or units in a hospital (e.g., intensive care, orthopedics, emergency room, medical/surgical unit) which may require them to perform different duties, the goal of addressing psychological and psychosocial needs remain the same (Mason & Merino, 2013).

### **Social Workers and Early Intervention Services with Diabetic Clients**

Rabovsky et al. (2017) argue that social workers that are part of an interdisciplinary treatment team may be better positioned to address the social, psychological, and environmental issues of persons diagnosed with chronic illnesses such as diabetes. One important means through which social workers can achieve this is via early intervention services. The goals of early intervention are to: facilitate adjustment to the impact and burden of the disease, reduce the risk of developing other significant health conditions, improve health and social functioning, and prevent progression of the condition, leading to death (Altfeld et al., 2013). Following a diabetes diagnosis, many individuals experience an immediate and significant psychological distress, shock, anxiety, and fear (Rankin et al., 2014). These reactions often result from clients' lack of understanding of the condition, worries about cost of medical care, fear of concurrent complications, and concern about the intense daily and lifelong management responsibilities (Smaldone & Ritholz, 2011).

Monaghan, Helgeson, and Wiebe (2015) state that although initial distress at the time of diagnosis is normal, prolonged difficulties adjusting to having diabetes leads to adverse long-term health and mental health outcomes. Chew et al. (2014) note that many patients with diabetes become disengaged in diabetes self-management or treatment process immediately after diagnosis, due to a lack of psychosocial support and an inability to access resources to address their needs.

Patients' prolonged difficulties in adjusting or in achieving successful self-management is also related to problems with access to resources, opportunities, and support. Tung and Peek (2015) hinge the successful management or prevention of diabetes on linking clients with community resources such as support groups, fitness centers, and farmer's markets. Other areas in which clients may require linkage with resources include support for medications or insurance (Rabovsky et al., 2017).

The consensus is that early intervention, especially measures targeted at addressing client's psychosocial factors, may also be vital to the reduction of client disengagement from the treatment process or diabetes self-management (Chew et al., 2014; Jain & Raji, 2008). Early intervention consists of providing needed medical, psychological, social, informational, environmental, and resource support immediately after diagnosis, to facilitate clients' initiation and engagement in treatment. Pratley (2013) examined the challenges and benefits of early intervention and the existing evidence-based guidelines designed to optimize the standards of care at the prediabetes and overt Type 2 diabetes stages. It was determined that the burden of Type 2 diabetes can be lowered substantially with intensive, multifactorial interventions. However, the

role social workers play in providing early intervention services to persons with diabetes has not been examined. More importantly, specific research focusing on social workers interventions targeting self-management, linkage with community organizations or resources, and problems with emotional and social support is scarce.

### **Summary of Literature Review**

In reviewing the literature, various search terms and databases were used to locate articles relating to this research topic in multidisciplinary and education databases. To ensure that full saturation was achieved, the reference list of each article was examined, to determine if there were any additional resources. The literature relevant to this study was critically analyzed, to gain a holistic perspective of scholarship on social workers and early interventions with diabetic patients. Gaps were identified, that relate to the role of social workers in facilitating early interventions for clients with Type 2 diabetes that target self-management, linkage with community organizations or resources, and problems with emotional and social support. The review also indicates a gap exists for additional research to guide and support social workers that provide services to diabetic patients, in addressing their patients' psychosocial and environmental needs. In Chapter I will describe the methodology utilized in this qualitative study, the research design, research questions, population and sampling method, method of data collection and analysis.

## Chapter 3: Research Method

### **Introduction**

The purpose of this study was to explore and describe the social worker's role in early intervention with clients with diabetes. With this study, I also addressed the gap in literature and provided information to health and social services agencies about the role that social workers play in facilitating early interventions for clients with Type 2 diabetes that target self-management, linkage with community organizations or resources, and problems issues with emotional and social support. This chapter will contain a detailed description of the study design, participants and sampling procedures, as well as procedures for data collection and analysis. Prioritized is information on the overall strategy used to collect and analyze data to address the research questions, followed by a delineation of the characteristics of the study's sampling frame and sample, including procedures that were used in the recruitment of participants (Burns & Grove, 2011). Lastly, the instruments that were used in the collection of data and the procedures employed in the analysis of collected data will be discussed.

### **Research Questions**

To achieve the purpose of the study, I developed the following research questions:

Research Question 1: What is the role of social workers in facilitating early interventions for clients with Type 2 diabetes that target self-management, linkage with community organizations or resources, and problems with emotional and social support?

Research Question 2: How could social workers be engaged more effectively to improve medical social work practice with diabetic clients?

### **Research Design and Rationale**

A qualitative research design was the basis to achieve the purpose of the study and address the research questions posed therein. Van Maanen (1979) defined qualitative research as: “an umbrella term covering an array of interpretive techniques which seek to describe, decode, translate, and otherwise come to terms with the meaning, not the frequency, of certain more or less naturally occurring phenomena in the social world” (p. 520).

Other prominent scholars (Creswell, 2013; Lincoln, Lynham, & Guba, 2011) concur that qualitative research has multiple but distinct approaches that enable a researcher explore variables in-depth, or examine a content area in such a manner that deeper understanding can be achieved. According to Wu, Thompson, Aroian, McQuaid, and Deatrck (2016), the “key to all qualitative methodologies is that multiple perspectives about a phenomenon of interest are essential, and that those perspectives are best inductively derived or discovered from people with personal experience regarding that phenomenon” (p. 494).

An interpretive-constructivist research perspective was the cornerstone of this work; according to Mackenzie and Knipe (2006), this approach ensures researchers utilize participants’ assessment of the situation as well as their own experiences. Additionally, I employed a basic qualitative research design – this method is less

structured and makes use of interviews, conversations, participant observation, focus meetings, analysis of diaries and other personal texts (Reiners, 2012). The objective was to encourage participants to share as much detail about their experiences, such that the depth of data collected is maximized, especially on information regarding their experiences (Reiners, 2012). The approach for this study was also basic in that the research problem was hinged on prior experiences, with data collected using interviews. A small sample size was used, and my interpretation of the findings was based on the responses of participants.

### **Role of the Researcher**

In qualitative research, the researcher is the most important instrument for data collection and analysis; consequently, my role in the study was to serve as a *human instrument* (Merriam, 2010). More importantly, there is a need for the human instrument to be cognizant of a personal frame of reference and bias and examine the collected data objectively through the process of epoché or bracketing (Merriam, 2010). Thus, it was imperative to continually engage in self-reflection during this study; this enabled me to ensure that the expressions and meanings conveyed in the findings and conclusions of the study were those of the participant, and not mine as the researcher.

### **Personal Bias**

As a social worker I have routinely worked with patients, including those with diabetes; I therefore did envisage the impact this condition would have in shaping my research until I decided to carry out a study that dealt specifically with social workers and early intervention with diabetic patients. Much of my knowledge about diabetes has



emanated from my interactions with these clients, although I had some knowledge about diabetes during my Masters and doctoral studies. It was readily noticeable that diabetic clients have multiple challenges that need to be addressed in the early stages of the condition. However, most social workers were either not sufficiently informed of these needs, or were not adequately addressing them. These experiences drove me to undertake this research project, to understand the role of social workers in providing early intervention for persons with Type 2 diabetes.

To eliminate bias, I tried to remain aware of and prevent my biases from influencing the trend of the questions and the overall structure of the interviews. I also maintained a personal reflexivity journal to record my thoughts, gestures, and behaviors during the interviews. This use of the journal assisted in my self-awareness and performance throughout the research study. Self-awareness and role clarification as the primary researcher of this study ensured that I adhered to the interview protocols necessary to carry out a successful study.

As previously mentioned, I collected data for the study using in-depth interviews completed in person. Given the number of participants (i.e., eight social workers) in the study, a single interview per participant was enough to address the research questions posed and achieve the study objectives. Each interview was audio-recorded and saved on a password-protected, personal computer. An interview protocol was used to guide the sessions (Appendix); to ensure privacy, I conducted each interview in a secure room at a public library, and at a convenient time, to avoid interruptions and disruptions. The

interviews were completed during periods in which social workers were off the clock, and the rooms were reserved ahead of time, to avoid unnecessary interruptions.

In all the sessions, I was alone with the participants, to guarantee confidentiality of information shared. Upon completion of the interviews, the recordings were transcribed verbatim, analyzed, and the results grouped into themes by me. According to Strauss and Corbin (2007), open coding is more appropriate for exploratory research (e.g., grounded theory), where the codes are derived from the collected data. The focus of exploratory research, such as this study, is to use an inductive process to generate a theory; therefore, coding is the means through which collected data is fractured, conceptualized, and integrated to form theory (Strauss & Corbin, 2007).

Using the framework suggested by Strauss and Corbin (2007), I read through the data (i.e., responses) for each of the participants several times, and then created tentative labels or codes for chunks of data that summarized the concepts. I subsequently identified relationships among the open codes, to form categories of related concepts. Categories of related concepts related to their subcategories to form more precise and complete explanations. In the final and last step, I organized the categories around a central concept. This step involved identifying the core concept, rereading the transcripts, and selectively coding any data that relate to the core concept.

### **Participants and Sampling Procedure**

I recruited the participants from an unknown number of social workers that work in diabetic hospitals located in one of the Southwest states in the United States. Due to practical considerations, the sampling frame was drawn from the total number of social

workers employed in diabetic hospitals in a large county within the state. Individuals with experience or knowledge about the phenomenon under investigation and a willingness to share their experiences were recruited for the study, via purposive and snowball sampling selection techniques (Maxwell, 2013). Ponterotto (2010) stated that using such a purposive approach enables the researcher to purposefully select only individuals and settings that will provide in-depth understanding of the phenomenon under investigation. Therefore, only social workers employed as part of treatment teams for individuals with diabetes were recruited.

My focus was also on recruiting people who were accessible. Trochim, Donnelly, and Arora (2016) defined an accessible population as “a group that reflects the theoretical population of interest that is accessible as at the time of sampling” (p. 81). Ponterotto (2010) suggests that sample sizes of five to 25 participants who have direct experience with the phenomena under consideration are suitable for a qualitative study – the sample for this study was in-between, initially comprising 10 participants working in several major hospitals that provide treatment services to many diabetic clients. The overall mortality for the duration of the study was two participants, who declined to continue after being apprised of the process, as well as personal stressors or conflicts with schedules. As the Snowball sampling method is useful for identifying potential subjects in studies where subjects are hard to locate (Trochim et al., 2016), I conducted interviews with eight social workers currently working with diabetic individuals; recruitment continued until a time that data was saturated.

### **Participant Recruitment Procedure**

Prior to commencing the study, I obtained permission from the Institutional Review Board of Walden University. Once approval was obtained, a snowball sampling technique was used to recruit participants. I reached out to my professional contacts working in diabetic hospitals to disseminate information about the study outside of the work environment. These contacts also shared the information about the study with other social workers using a recruitment flyer, and asked them to contact me if interested in participating. The recruitment flyer contained information about the study as well as how interested participants could directly contact me. Following their expressed interest, I directly contacted and set up appointments with interested participants to discuss their concerns, clarify questions, and schedule times for the in person or face-to-face interviews. No incentive was provided to participants. However, participants were sent a thank-you card as a token of gratitude for their participation. Because the intended sample was achieved (eight social workers), I did not expand recruitment to neighboring counties.

### **Instruments**

I collected data for this study using in-depth, qualitative interviews. The interview sessions took approximately 60 minutes each, to assure exploration of all areas of research questions under consideration. The interviews were guided by an eight-item, semi-structured, qualitative interview protocol (Appendix), developed based on the literature review. More importantly, given that, in qualitative studies, the researcher is the most important instrument for data collection and analysis, I facilitated understanding

between the respondents and me by being instantaneously receptive and flexible (Merriam, 2010). I also engaged in self-reflection – part of my obligation of being a human data collection instrument. As both Moustakas (1994) and Merriam (2010) pointed out, it was important for me to be aware of my personal biases and evaluate how they may have influenced the data collection and interpretation. Moustakas recommends that researchers engage in the process of epoché or bracketing. Epoché or bracketing is a process to lay aside biases and preferences, so that they can have experience phenomena anew.

### **Data Analysis**

In the analyses of the data, I tried to ensure that the issues of trustworthiness, credibility, transferability, dependability and confirmability were addressed.

#### **Trustworthiness**

I analyzed all the transcripts, using thematic analysis to assure accuracy and limit bias in results. Results of the analyses were shared with the chair and other members of my dissertation committee. All relevant texts from the transcripts were read, and categories compared or cross-referenced to ensure consistency (Odena, 2013). This process, called analyst triangulation, is defined by Creswell and Miller (2000) as: “a validity procedure where researchers search for convergence among multiple and different sources of information to form themes or categories in a study” (p. 126).

Previous researchers (Carlson, 2010; Maxwell, 2013) described the process of member checking as checking-in with the participants, after the initial analysis of collected data. Following the transcription of each interview, I contacted each participant

by telephone, went over the summaries, to ensure that I had not misinterpreted or manipulated their words, and had stayed true to the information shared. This provided respondents the opportunity to revise, edit, or add to any of their responses. It also afforded me the opportunity to ask the respondents to check if the themes identified accurately captured the phenomena under consideration.

### **Credibility**

Credibility in qualitative research is focused on demonstrating the connection between what the researcher is studying and the steps that are taken to ensure that observations are credible (Merriam, 2010). Given the nature of qualitative research, Merriam (2010) proposed five different strategies that can be used to increase the reliability of the findings of qualitative research studies. These five strategies, which were incorporated into the research study, include triangulation; respondent validation; adequate engagement in data collection; reflexivity and peer examination or debriefing. Triangulation involves the investigation of the topic or phenomenon from different viewpoints. In the study, information was collected from eight who provided varied but detailed descriptions of their experiences within the ambit of the study. Assistance was sought from my dissertation committee, a peer examiner, and participants of the study, to help analyze and validate the findings and conclusions. Furthermore, I checked participants' responses against what I observed on-site, or what I had read in documents relevant to the phenomenon of interest (Merriam, 2010). To achieve this, I made notes of my observations in a journal.

Respondent validation involves seeking feedback from the participants about the emerging findings of the study. Therefore, at the end of each participant's interview, I scheduled a meeting, to conduct the process of member checking. Following the completion of the transcription of the data, I also met each participant in person and provided them with a summary of their responses to each interview question. This granted the opportunity to add, revise, and edit their responses and to also discuss initial emerging themes. I also ensured that there was adequate engagement in data collection; to determine this, I assessed for information contradictory to the themes. To be reflexive, I kept a journal to record my personal beliefs and attitudes towards the subject matter, as well as with regards to the entire research process. Typical entries included personal beliefs and attitudes, research or interview questions, data analysis and reporting. The intent was to keep track of my observations, thought processes, and personal reactions as I moved from one stage of the research procedure to another. This activity of journaling enabled me to evaluate my reactions during the writing process, as well as how I applied my reasoning to identify, connect, and explain the relationships in the phenomenon under consideration.

A final aspect of ensuring credibility was the completion of peer debriefing, which involved the use of a colleague as a peer examiner. Once all data was analyzed, I discussed my reactions and experiences with my peer examiner, and she assisted in identifying my predispositions and subjectivity, and its possible interference with the analysis process. I reflected on the participants' perceptions and responses from different

points with feedback from my peer examiner, to avoid embedding my own perceptions and suppositions into their experiences (Moustakas, 1994).

### **Transferability**

In qualitative research, transferability focuses on ascertaining whether the results or findings can be applied to similar populations that share the characteristics and experiences of the population being examined. To enhance the transferability of the result of the study, I provided detailed steps in the data analysis process as well as sufficiently descriptive data (Merriam, 2010). More importantly, a reasonable number of participants' direct quotes from the transcripts were presented in the Results section of the study, to allow readers to draw their own conclusions about the transferability of the findings.

### **Confirmability and Dependability**

According to Lincoln and Guba (1985), the issue of confirmability and dependability of the data collection and analysis in qualitative research can be addressed by using an audit trail. This involves using a memo journal to chronicle the data collection and analysis process. To ensure dependability, I chronicled how the data was collected, the themes derived, as well as the decision-making process as the study was being completed. I maintained this information as part of an audit trail, to ensure other researchers can readily appraise the authenticity of my observations and judgments in the long-term. Important documents that will form the audit trail include the approval from the Institutional Review Board, informed consents, the raw data, and my memo journal.



### **Research Ethical Considerations**

As a practicing social worker and a doctoral researcher, it was imperative for me to put in place measures that ensured anonymity for respondents, as well as the confidentiality of collected information (Merriam, 2010). It was also important that the procedures did not cause any harm; participants were not deceived or manipulated in any manner. An informed consent form was given to each participant, and used to orient participants on their rights, voluntary participation, confidentiality, and use of collected information. The number of questions that was posed, as well as the expected length of the interview, was also shared with participants. Additionally, they were informed that they were free to withdraw or discontinue their participation at any time for any reason (e.g., if they felt uncomfortable during the interview sessions). The IRB approval reference number is 10-25-18-0639107.

To ensure confidentiality, participants' identities were coded. I was the only one with access to the list of codes assigned to each participant. Audio tapes or recorded information were stored on a password-protected personal computer or secured in the cabinet in my home office, and will be so for five years. The results of the study were disseminated to all stakeholders involved; participants were also informed that recordings would be erased, five years after completion of the dissertation.

### **Summary**

In chapter 3, I provided an account of the research methodology that was used to answer the research questions in this study. Social workers employed in the diabetes

treatment centers at selected hospitals participated in the study. Recruitment of participants involved the use of recruitment flyers, which were handed out to my professional contacts (social workers) outside of the work environment. These individuals also facilitated the dissemination of the flyers with others outside of their work settings. In the chapter, I also utilized a qualitative research design; face-to-face interviews were conducted for 60 minutes, with eight social workers. All relevant texts from the transcripts were read and categories compared or cross-referenced, to ensure consistency and arrive at the themes or categories in a study. Chapter 4 will be a presentation of the results of the data analysis. The chapter will also contain the themes, as well as direct quotes from the participants that support my explanations of the results.

## Chapter 4: Results

### Introduction

The purpose of this study was to examine the role of social workers in facilitating early interventions for clients with Type 2 diabetes that target self-management, linkage with community organizations or resources, and problems with emotional and social support. In this chapter, I will present the results (i.e., themes) that emerged from the interviews of social workers that participated in the study. The responses of each participant were transcribed separately and coded into themes. To ensure confidentiality and anonymity, participants chose pseudonyms, which I will use throughout the presentation of the results in this chapter.

### Settings

I undertook this study in a large southern state in the United States. The interviews were conducted in secure rooms that I reserved at a large public library. The rooms were study rooms, with a door that could be secured from the inside. There was good lighting and the temperature was well controlled. The rooms allowed participants to be focused because they eliminated distractions and competing background noises with a measure of sound proofing. To accommodate the busy schedule of the participants, I made the reservations based on a convenient time selected by each of them. No adverse events occurred during the interview process.

### **Participants Demographic Data**

The total number of participants came to eight; the demographic breakdown was three males and five females. Three of the participants identified as Caucasian/White, three participants identified as African American/Black, and two identified as Hispanic/Latino. All participants had a master's degree in social work and were also licensed in the State. In the following list, I will present the eight participants selected for this research study:

- Emma was a White female who had worked as a licensed social worker for eight years with diabetic clients
- Olivia was part Hispanic and part White female. She considered herself to be a strong Hispanic woman, who was inspired more by her Hispanic family heritage. She had worked as a licensed social worker with five years' experience working with diabetic clients
- Sebastian was a Hispanic, male, licensed social worker with over five years' working with diabetic clients
- Jacob was an African American male, veteran, and licensed social worker who had worked with the Veteran Affairs among the homeless population for four years
- Rose was a White, female, licensed social worker with 30 years' experience working with diabetic clients
- Joshua was an African American, male, licensed social worker with six years of work experience with diabetic clients

- Madison was a White female who had worked as a licensed social worker for nine years with diabetic clients
- Genesis was a part African and part African American female. She identified as an African American woman. She was a licensed social worker with eight years' experience working with diabetic clients

### **Data Collection**

Qualitative data for this study was collated in a conversational manner, to encourage participants to respond openly and truthfully. Per the interview protocol, questions were posed to each participant, and followed up with further queries to elicit clarification. Prior to conducting each interview, I explained the nature of the study and provided each participant with informed consent forms to complete. I oriented participants on their rights, voluntary participation, confidentiality, and the eventual use of collected information. I also shared with them the number of questions that that would be posed to them, as well as the expected length of the interview. I told each participant that they were free to withdraw or discontinue their participation at any time for any reason (e.g., if they felt uncomfortable during the interview sessions). The data collection process consisted of tape-recorded interviews and written notes – to ensure confidentiality, participants' identities were coded. I was the only one who had access to the list of codes assigned to each participant.

### **Data Analysis**

All interviews were transcribed verbatim upon completion, with a subsequent read through of the transcripts for each of the participants' interviews to enable the

creation of tentative labels that summarized the perspectives being interrogated.

Following was the identification and isolation of longer paragraphs from the text, and their organization under the tentative labels. These labels were narrowed down to derive the central concepts upon which the study was based. In the final step, I reread each transcript and highlighted statements, and categorized the responses as: prevalence of the provision of early intervention services, the role of social workers in early intervention, and ways to effectively engage social workers in early intervention services.

Responses to Questions 1, 2, and 3 were coded as Theme 1, while the answers to Questions 4, 5, 6 and 7 were coded as Theme 2. The responses to the elaboration questions served as the subthemes (i.e., specific roles of social workers in early intervention), and Question 8 and its elaboration probe provided responses that I coded as Theme 3.

### **Emergent Themes and Subthemes**

The core themes that emerged from the data analysis in this study, using a basic research qualitative design and an interpretivist/constructivist paradigm are as follows:

1. Early interventions are scarcely provided in social work services for persons diagnosed with Type 2 diabetes
2. Role of social workers in early intervention:
  - (a) educator,
  - (b) resource broker,
  - (c) change agents for clients,
  - (d) counselor,

- (e) advocate, and
  - (f) community change agent
3. Ways to effectively engage social workers in early intervention:
- (a) provision of opportunity
  - (b) emphasis on early intervention in interdisciplinary diabetes management team
  - (c) empowerment of social workers and
  - (d) reduction of professional rivalry and mistrust

The themes and subthemes provided a deductive explanation of the subjective matter.

#### **Evidence of Trustworthiness**

Various strategies were employed, to ensure the trustworthiness of the results of the study. This primarily consisted of member checking; at the end of each interview, I scheduled follow-up meetings and met with each participant in person, to verify the transcripts and to go over the interpretations of their responses, to ensure accuracy. Peer debriefing was also conducted; colleagues and the dissertation committee members provided me with multiple perspectives on data interpretation. To ensure transferability, detailed descriptions of participants' experiences within the themes of the study, settings, and data were provided. During this process, I also assessed information contradictory to the themes, using information from my reflexive journal. In addition, presenting the detailed steps of the data analysis process, as well as sufficiently descriptive data comprised of a reasonable number of participants' direct quotes from the transcripts in the results section of the study was pertinent – to allow readers to draw their own

conclusions about the transferability of the findings. Throughout the data collection, I maintained an audit trail; a memo journal was kept, to chronicle how all data was collected, questions that emerged, and themes as well as the decision-making process, to ensure other researchers can readily appraise the authenticity of my observations and judgments in the future.

## **Results**

### **Theme 1**

The first research question was: What is the role of social workers in facilitating early interventions for clients with Type 2 diabetes that target self-management, linkage with community organizations or resources, and problems with emotional and social support? To address this question, I posed the Interview Questions 1, 2, 3, 4, 5, 6, and 7 from the interview protocol (Appendix B) to participants. These questions addressed the areas of the relevance of early intervention services, self-management, and the specific role(s) of social workers.

The responses of participants indicated that early intervention services provided by social workers are scarce and the point at which such services are provided tend to be indeterminate. Even when there is a coordinated approach to service delivery involving an interdisciplinary team, social workers may not come immediately into contact with a client in need of such services unless the client has an immediate need for such services.

Rose responded that:

“In fact, it is quite seldom that people are referred to me for that particular purpose. There is an intensive case management program that I am part of, but



most of the clients that are referred to me are often at a far along point in their diagnosis or condition.”

Genesis stressed that:

“Most of the clients that I serve are low-income individuals with an increased incidence of Type 2 diabetes and many of whom are not sufficiently aware of the symptoms of Type 2 diabetes or unable to undergo preliminary medical examinations or tests [screenings] until their condition is at a much-advanced level.”

Jacob also expressed that:

“Some of my clients are not often concerned about diabetes or the poor state of their health until they lose a toe or leg or have a blurry vision. They show up much later.”

In terms of availability of early intervention services and access to such services, Jacob also responded that client circumstances or characteristics are a significant contributory factor.

According to him:

“Clients that we service here at the VA often go to diabetic clinics with referral from the VA hospital, and if they are eligible, some may only have Medical Access Program (MAP) cards and some may not even have insurance.”

For Emma:

“It is socioeconomics that impact their access to services and their ability or capacity to sometimes seek or even receive services. A good number of clients

that I see live in poverty, and their conditions can be attributed to lack of access to preventative services. When you add problems with language barriers and distrust of health workers overall, it becomes a big issue.”

Participants expressed that early intervention programs that teach self-management, provide access to community resources, and address emotional and psychological problems are important.

Genesis said:

“You would be amazed at how a lot of the clients know very little about diabetes in general, or Type 2 diabetes. I mean listening to their concerns, fears and what they need to do to take care of themselves [pause]...and thinking of ways that I can refer them to services that can assist them to gain important information [knowledge] on how to take care of themselves or find the needed is really important.”

Jacob also stated:

“What we are dealing with are issues that often escalate and become problematic because these individuals do not know what to do or the wherewithal to take to do so. I mean some of these people are separated from loved ones and friends and may not even have a roof over their heads.”

**Serving as educators.** Respondents expressed that social workers serve in the role of educators in early intervention. Although the way they serve as educators depends on the population that the social workers serve or work with, one common feature among all the

participants' description of this role was that social workers educate clients on how to regulate their diets, and live a healthy lifestyle.

Jacob explained it thus:

“My role is to educate, provide information regarding diet, community food pantries that provide fresh vegetables and healthy foods to veterans with diabetes. Those are far and in between in our community. Most of the food that poor people with diabetes – including veterans – eat have high starch, high calorie and poor nutritional value. I came into my discovery of diabetes in the population that I work with six years ago. In one of the clients that I first noticed the phenomenon, one day he was alright and walking, six days later, he had a toe amputated; next time he came in he was on wheel chair and had his leg amputated, and over time I noticed that he had diabetes but was also actively drinking beer which contains starches and sugar. I feel that educating clients on proper diets, as well as where they can obtain such food is important in an important first step.”

Rose mentioned:

“Providing educational classes for newly diagnosed individuals is very important to the self-management of diabetes. Teaching clients that the food they eat can either improve their situation or make their condition worse is important [pause] I focus not only on the individuals but also their immediate family and support system. Understanding the role that blood sugar plays is very important [pause] I believe that helping clients to think about healthy and affordable alternatives to what they eat daily that can help them to stay health and better able to manage

their condition should be the focus. We have a certificate class that we do on diabetes for 12 weeks. Participants go through the class and get a certificate, and it helps with dietary choices.”

Joshua commented:

“I refer the clients to community organizations that provide classes on nutrition and diet for persons with diabetes. I also follow up with clients to ensure that clients are taking advantage of the services and are doing what they are actually supposed to be doing.”

Genesis, one of the participants, also expressed a similar but slightly different viewpoint.

She said:

“I make referrals, but I also focus more on the self-management component, I mean we are dealing with clients that also have behavioral, emotional problems. I think that making changes to previous habits, and day-to-day routines can be especially difficult for some of these people. I think their strong beliefs and mindsets must be addressed through education on diet and self-management.

Education, by showing them the worst-case scenarios, can also be useful.”

With regards to education, Jacob also added that the VA offers two-day diabetes courses for veterans with prediabetes. According to him: “our diabetes classes are taught by an interdisciplinary team including certified diabetes educators, registered nurses, dietitians, pharmacists, and social workers. The great thing about these classes is that clients are able to organically develop support groups.”

**Resource broker.** All eight participants described being a resource broker as one of the central roles that they play in early intervention for clients with diabetes. They especially see themselves as individuals who are positioned to negotiate the resources needed for early intervention for their clients, and to ensure that the necessary resources are available to achieve treatment objectives. When discussing the resource broker role, each respondent described it as one that involves working collaboratively with the client and individual organizations that are directly or indirectly responsible for providing a service related to early intervention, for the client. Joshua and Jacob both expressed that part of their case management responsibilities includes assisting clients to obtain medications or insurance, health care services, accommodation, finance and even employment.

Jacob further explained it this way:

“I suppose for me it means getting information, information, and more information about their needs as well as what is available in the community. It also means checking with the client by saying what do you think about this, and encouraging them to check it out...I always follow up with the clients with respect to what they were asked to do.”

Madison also expressed a similar opinion:

“One of the things that I pay attention to is being knowledgeable about resources in the community, and the location of services. Most of my clients need help with many things...[pause] I have good, solid relationships with people and organizations in the community. These are my go-to people.”

**Change agents for clients.** Another important subtheme was that of being a change agent for clients. Social workers assume this role for clients by serving to seek or enhance access to resources, services, and opportunities that promptly improves the management or stops the progression of the condition.

Sebastian explained this subtheme:

“I understand that we may not be the experts or the ones with all the solutions to some of the immediate needs that our clients may have, but one thing, we do have, and use is our networks and resource organizations in the community [pause]. I mean we can share information about where clients can go to get further help or information concerning how to take care of themselves. What you find with many of the clients is that they are sometimes not only aware of what is out there but what they need to do to access what they need, sometimes how to present their issues...In some instances, some people may even appear overwhelmed and reflect a sense of helplessness, it is therefore important that we act promptly and we are walking with the client step by step.”

Sebastian’s viewpoint is that in this role, social workers do more than provide information or make referrals; they also follow through, to ensure that needed resources are made available for the client. Armed with knowledge of resources, eligibility requirements, the requisite fees and the location of services, social workers often go beyond their prescribed role within the treatment interdisciplinary team.

Rose thinks that:

“No other professional within a hospital [treatment team] clearly understands the confusion, anxiety or worry that client’s feel when they are told they have diabetes. I mean we are the individuals that are able to make a connection with these individuals, and to break things down, and come up with a plan on how they can receive the necessary resources and support.”

She is therefore of the opinion that part of social workers’ responsibility also, in this role, is to provide didactic and experiential education on stress management, relaxation, and coping.

For other participants, the central role of the social worker is to work in conjunction with qualified diabetes healthcare professionals to assist clients in making basic lifestyle changes (e.g., drinking or smoking cessation and self-management skills). In this capacity, social workers serve as bridges between healthcare providers, the health care system, and people with, and at risk, for diabetes.

Emma said:

“I believe that concurrently working with other health professionals [diabetes treatment specialists] to emphasize lifestyle changes at the start of treatment planning is important to having good treatment outcomes. Most of the clients tend not to like this aspect of having to adjust or sticking to a plan. However, if they are to have good psychosocial adjustment to the condition, then, it is something that the social workers need to emphasize and be firm with. I guess the way we allow the clients to do whatever we like, in terms of eating or drinking is what needs to change.”

Madison concurred:

“When these individuals are newly diagnosed, our suggestions are not taken seriously or are even received with skepticism. This is because there may not be much visible symptoms. Usually symptoms become apparent when hyperglycemia is above the renal threshold of 180 mg/dL. When they do not experience any symptoms, they are not often motivated to self-manage.”

Most of the participants agreed that they had a voice when it comes to interdisciplinary teams.

In Joshua’s opinion:

“I think social workers have a voice as a member of the interdisciplinary teams because we are there as professionals. I believe that I will have a concern when I am deemed a minor god [irrelevant expert] and they [doctors, nurses and other health professionals] are considered experts. But it is always good to have an interdisciplinary team where we can all sit and talk. From the disciplines that we are from, the doctor’s position is: “do what I say,” while the social work position is: “how can I help, teach and grow the individual?”

**Counselor.** Participants provided detailed information regarding the psychological, emotional, and psychosocial challenges that clients face, immediately following diagnosis of Type 2 diabetes. Responses delved specifically into the role that social workers play in addressing this phenomenon as part of early intervention. Several of the respondents agreed that clients experienced significant psychological distress, depression, and anxiety from the condition and other personal factors. For individuals who are low-



income, homeless, or veterans, these factors are engendered by problems with housing, finances, and lack of health insurance.

Madison stated:

“I do not think a lot of people have first-hand knowledge of diabetes and how people that have it are particularly vulnerable to developing mental health disorders. Many individuals experience psychological stress when diagnosed. At the most basic level, most of the people that are newly diagnosed with diabetes experience some type of anxiety or depression. Accumulation of stress is likely to elevate the glucose level in the blood. The stress leads to increased eating, as well as cigarette and alcohol consumption. As a licensed social worker, I often provide individual and family counseling sessions to help clients and their families with stress.”

Olivia and Emma also noted the importance of the counselor role that social workers must assume when working with clients newly diagnosed with Type 2 diabetes. Both participants stated that, at the very inception, most of their clients experience various forms of emotional disturbance such as anger, fear, guilt, grief, and depression, as they anticipate problems with control, self-image, disability, and independence.

Olivia said:

“I mean most of the clients are really bummed out [angry and frustrated], worried [pause] umm...concerned about how it will all play out in the long run.”

Emma's interpretations of the emotional and psychological challenges of individuals newly diagnosed with Type 2 diabetes shared similarities with Olivia's, but she further reflected:

“What will be meaningful and impactful is to explore client's emotions, coping mechanisms and support resources. You absolutely want to carry out these concurrently.”

Participants also suggested that social workers assume the role of a counselor in early intervention because of the number of clients that present with substance abuse issues, or co-occurring mental health disorders.

Genesis said:

“Helping people deal with emotional issues is a huge part of my responsibilities. I will say 50% of the caseload that I have are homeless and have substance abuse issues. Focusing only on their housing, or health, financial needs is like putting Band-Aid here and there, you have to also explore and address some of the psychological or mental health issues.”

The other participants also agreed on the need for social workers to assume the role of a counselor when providing early intervention services. For instance, Jacob notes that: “not enough social workers pay attention to the medical, emotional and mental health issues that client's experience. Our focus has mainly been on addressing the psychosocial issues.”

This viewpoint was also echoed by Rose.

According to Rose:

“We don’t really learn about medical issues as part of our training. The same is true for counseling and other related subjects. What I notice in my practice setting is that medical doctors do not have the time to either educate or counsel people when they are first diagnosed with diabetes.”

When asked whether counseling was consistently conducted with diabetic clients, most participants responded in the negative.

Jacob said:

“For us here at the VA [Veterans Administration], especially the client population that I work with, our clients are at different points in terms of their needs and so you must work with them in that way [pause] I mean, my role in providing counseling is simple, just be open as best as I can. I have learned to focus on important areas and hands-off areas that are not considered problem areas. However, as a professional and an expert, I do highlight and focus on areas that are likely to result in mental disorders.”

As Sebastian explained:

“Too many times, our focus is on addressing the immediate physical and psychosocial needs of the clients because those are the areas the clients seem to emphasize. However, there is a need to also address psychological and emotional issues that clients experience.”

**Advocate.** Data analysis revealed the backing role that social workers play as part of an interdisciplinary team for the treatment of persons with Type 2 diabetes. Participants were unanimous in their descriptions of the advocate role of social workers in early

intervention in Type 2 diabetes, stating that it was necessary for social workers to assist clients to uphold their rights to receive resources and services. Additionally, respondents noted that social workers should actively support organized efforts towards changing potentially negative programs and policies that impact the ability of clients to access, or benefit from programs.

Jacob said:

“I have served veterans some of whom often struggle even to access VA benefits for which they are eligible. There are tons of paperwork to complete, and when they do not have certain information that is needed for the process, there is a lot of delay [pause]. I have had to reach out on agencies in the communities on behalf of clients.”

Emma also said:

“I mean we do this but not holistically. When they need services or benefits make calls or complete paperwork, but we do not reach them enough to advocate for themselves.”

**Client empowerment.** Some participants expressed how social workers are performing below expectations, in terms of client empowerment for advocacy in early intervention. Rose narrated her experience in some of the agencies in which she has worked in the past:

“I was actually shocked to see that sometimes there is a rush to simply attend to the physical or medical needs of the person, without properly empowering the person to learn how to do things for themselves. How do you expect somebody

who is homeless, unemployed or even have a mental health issue to put across clearly what they need and to be able to do so when needed?”

Madison also added:

“Diabetes is a chronic disease and there is need for extensive self-management. Doctors and nurses may choose to encourage, or cajole patients to perform self-care tasks, but we as social workers focus on empowerment around self-care. Maybe we just don’t learn enough of the medical aspect of chronic diseases or we tend not to focus on empowerment as much.”

Most of the participants stressed that successful self-management requires setting goals and making crucial daily decisions congruent with values and lifestyles, as well as multiple psychosocial factors. Joshua notes that client or patient empowerment has not been consistently emphasized in early intervention, and empowerment approaches have not also been tailored to fit client’s priorities, goals, resources, culture, and lifestyle. He added: “simply telling them to do this and that is not empowerment, we have to really understand the clients background and surrounding influences and development an empowerment framework accordingly.”

**Acting as agents of change in the community.** Participants also expressed that when it comes to early intervention, their role is to act as change agents, by working with groups that seek to improve access to health services for diverse client population. Noteworthy is Jacob’s experience: he has worked with veteran support groups in the community that advocate for changes in how some early intervention services are provided to veterans.

Jacob stated:

“As a veteran myself, I remember when I was pretty much uneducated about diabetes or self-management. In my second tour in Iraq in 2003, there was a friend of mine; we were in the same unit, who was diagnosed with Type 2 diabetes. However, the seriousness of the diagnosis was never emphasized enough for him to make lifestyle changes. Since leaving the force, the word I spread when I talk to people now is, especially when I talk to active duty service men or veteran, is make sure that you stay on top of things if you are ever diagnosed with diabetes. It is not just these soldiers that I work with, but also with support groups so that they are better aware of ways in which they can provide the necessary support to veterans receive some type of early intervention services.”

Like Jacob, Genesis “loves to volunteer and collaborate with community programs that provide residential services to persons with disabilities the elderly and homeless to educate them, increase awareness, empower to speak out and get their needs met.”

## **Theme 2**

The second research question queried how social workers could be engaged more effectively, to improve medical social work practice with diabetic clients. To answer the question, study participants were asked: how could social workers be engaged more effectively to facilitate early interventions that target self-management, linkage with community organizations or resources, and problem issues with emotional and social support for clients with Type 2 diabetes? The participants were all in agreement that

social workers can be provided with enhanced opportunities and support, to deliver more effective services as members of interdisciplinary diabetes treatment teams. Specifically, the responses included increased emphasis on early intervention, and the standpoint that providing flexibility and control for social workers in their treatment settings could increase the engagement of social workers in early intervention for the treatment of Type 2 diabetes clients. The detailed responses are provided in the following paragraphs.

Participants also shared their perspectives on ways through which social workers can become active and involved in the treatment of Type 2 diabetes, in hospital settings. The responses indicate that social workers can be more effectively engaged when given the opportunity to do so. Related to the lack of opportunity, is also an absence of overall emphasis on early intervention about diabetic management. This is only possible within the context of service delivery, when other professionals or the practice setting prioritize early treatment as a meaningful and important process in diabetes treatment or management.

Joshua stated:

“It really depends on what is emphasized in each practice setting. When we work with other professionals, our roles and the scope of what we do could simply be limited. I think providing some flexibility and control for us to provide over their treatment.”

Social workers should be afforded the opportunity to engage in multiple roles in interdisciplinary treatment teams for which they have the requisite skills and competencies. Due to their educational background and credentialing, social workers can

safely and effectively perform tasks that have formed the traditional skill base of other professions. Furthermore, service outcomes can be compromised when social workers lack access to the full range of opportunities, supports and resources (including the technology) necessary to fully engage in early intervention.

As Rose expressed:

“If providing early intervention is encouraged or emphasized then that would also encourage us.”

In Jacobs’s opinion:

“Social workers are seen more as people that deal only with client psychosocial issues.”

Collectively, this could mean that even when social workers are present, their efforts towards early intervention may be undermined, or not fully supported, as they should be.

### **Theme 3**

**Empowerment of social workers.** Participants expressed that within interdisciplinary teams, other health professionals sometimes consider social workers as lacking medical knowledge or the requisite expertise to plan and implement early intervention strategies for persons diagnosed with diabetes.

Genesis suggested that social workers:

“...May need to have coursework on medical aspects of chronic health conditions. There is need to understand the pathological and physiological nature of diabetes. I am lucky that I have worked with professionals that are open and often share their knowledge with me...[pause]...I think that social workers can be successful



in early intervention, if they receive some type of professional training [professional development] especially for those that work with clients with chronic illnesses.”

Jacob suggested that:

“Reducing professional rivalry and mistrust can increase the engagement of social workers. If we had a seat at the table in terms of planning capacity, in leadership roles in health care settings, so we had a voice to speak up to have the impact. If we can have more resources to do more hands-on support [pause]...being able to influence policy that focuses on early intervention. If people in general and other professionals stop seeing us only as professionals that have expertise in the psychosocial issues, then we may become more empowered and more engaged.”

Other participants align with Jacob’s perspective regarding empowerment and positioning. Many expressed that they are often well supported with resources and opportunities to be proactive, or to focus on areas that are related to early intervention.

### **Summary**

The purpose of this study was to examine the role of social workers in facilitating early interventions that target self-management, linkage with community organizations or resources, and problems with emotional and social support for clients with Type 2 diabetes. The themes that emerged were: (a) social work early intervention services for diabetic clients are limited, (b) roles include educator, resource broker, counselor, advocate, and community change agent, and (c) ways to effectively engage social workers in early intervention are contingent on opportunity, interdisciplinary respect, and

more resources and support. A framework via description of the roles that social workers assume in early intervention was also presented, as well as participants' responses on ways through which social workers can be more effectively engaged in early intervention strategies. In chapter 4, the findings, with direct quotes from the participants that support my explanations are presented. The next chapter will discuss the findings, my personal observations and reflections, implications of the findings, as well as the strengths and limitations of the study.

## Chapter 5: Discussion, Recommendation and Conclusion

### Introduction

The purpose of this study was to address the gap in the literature and provide in-depth information about the role of social workers in facilitating early interventions that target self-management, linkage with community organizations or resources, and problems with emotional and social support for clients with Type 2 diabetes. Data collection was achieved via in-depth interviews with social workers employed in hospitals. The participants' responses were analyzed using open coding, and organized into themes. Although each participant expressed unique perspectives, a meticulous analysis of the data revealed common themes. The themes that emerged from respondents were:

1. Early interventions are scarcely provided in social work services for persons diagnosed with Type 2 diabetes.
2. Roles of social workers in early intervention are:
  - (a) educator,
  - (b) resource broker,
  - (c) change agents for clients,
  - (d) counselor,
  - (e) advocate, and
  - (f) community change agent.
3. Ways to effectively engage social workers in early intervention are primarily via:

- (a) provision of opportunity
- (b) emphasis on early intervention in interdisciplinary diabetes management team
- (c) empowerment of social workers and
- (d) reduction of professional rivalry and mistrust.

An interpretivist-constructivist approach was chosen for this study to unearth participants' assessment of the situation or explanation of their experiences with the phenomenon examined. McQueen (2002) explained that "interpretivist researchers seek methods that enable them to understand in depth the relationship of human beings to their environment and the part those people play in creating the social fabric of which they are a part" (p. 17). An interpretivist-constructivist, basic qualitative research study on the topic under consideration was absent from social work and health care literature, making this study the first of its kind. However, the findings of this study do have some connection with results of similar research conducted in the past.

The findings of this study indicated that early intervention services provided by social workers are scarce and tend to be indeterminate. This information boosts the argument that if early intervention services were clearly defined and purposely planned and executed, then better outcomes are a likely recurrence. This finding is like the results of a study by Pratley (2013) who concluded that early intervention services for persons diagnosed with Type 2 diabetes is not emphasized in many health and human services settings. Consequently, many professionals, including social workers, who provide

intervention services, do not place much emphasis on early intervention services to clients, despite the identified benefits (Worthington, 2008).

However, the respondents acknowledged the importance of early intervention psychosocial services and supported facilitating the self-management and treatment outcomes for persons diagnosed with Type 2 diabetes. This is consistent with the findings of the ADA that early intervention services that target lifestyle issues and psychosocial problems significantly reduce the progression to Type 2 diabetes by more than 40% and are a safer and highly effective approach, than pharmacological treatment and other interventions. The results of this study suggest that early intervention services are needed and should be encouraged as a central component of treatment for individuals that are diagnosed with Type 2 diabetes. Social workers in interdisciplinary teams in which early intervention services are encouraged are more likely to emphasize such practice in their intervention with their clients (Tuomilehto & Schwarz, 2016; Worthington, 2008).

Participant responses about the relationship between early intervention and self-management indicated that early intervention assists the individual to become aware and engaged in the self-management process. Such clients are more likely to seek out more information and resources as well as to pursue healthy living and make the necessary lifestyle changes. This finding is supported by the results of previous studies (Nazar, Bojerenu, Safdar, & Marwat, 2016; Tuomilehto & Schwarz, 2016), which concluded that early intervention services promote better self-management in clients diagnosed with Type 2 diabetes. Powers et al. (2017) also noted that early intervention services facilitate the acquisition of knowledge, skills, and abilities that are crucial for self-care, which

helps persons diagnosed with Type 2 diabetes to develop the capacity to make informed decisions, engage in self-care behaviors, and collaborate actively with the treatment team, leading to improved treatment outcomes and greater quality of life.

Another component of the first research question involved the role of social workers in facilitating early interventions that target self-management in persons diagnosed with Type 2 diabetes. The responses of the study participants in relation to the question revealed two major roles: educator and counselor. Participants' responses indicated that education is two-fold; one aspect focuses on providing some basic information about the condition and necessary adjustments in lifestyle, and another that provides information about community resources. The results on the educator role of social workers in early intervention are consistent with the findings of previous studies (Ciporen, 2012; DeCoster, 2003, Harris & Lustman, 1998; Rabovsky et al., 2017; Tung & Peek, 2015).

The findings about social workers' role as counselors in early intervention are also supported by previous research (Chew et al., 2014; Craig & Muskat, 2013), in that social workers assume multiple roles when providing services to individuals diagnosed with Type 2 diabetes. Furthermore, the findings of the social workers' roles as resource broker, advocate, and community change agent in early intervention are also supported by previous studies (i.e., Harris & Lustman, 1998; Tung & Peek, 2015) that emphasize community resources, such as support groups, fitness centers, and farmers' markets.

The second research question was: How could social workers be engaged more effectively to improve medical social work practice with diabetic clients? To address this,

I posed Interview Question 8 from the interview protocol to participants. Their responses indicated that an increased emphasis on early intervention, providing flexibility and control for social workers in their treatment settings, and more resources or support could increase the engagement of social workers in early intervention for the treatment of Type 2 diabetes clients. Previous researchers (i.e., Ambrose-Miller & Ashcroft, 2016; DeCoster, 2003) corroborate the findings of the present study, in that giving social workers opportunities, resources, and visibility within an interdisciplinary team contributes to their engagement.

In this work, constructs of the role theory became evident (Hindin, 2007; Joo, 2012). Despite acknowledging the significant role of social workers in implementation of early intervention, participants report they were faced with contextual barriers that impeded the successful implementation of early intervention measures for persons diagnosed with Type 2 diabetes. This supports tenets of role theory, which hypothesizes that ultimately, it is the institutions that convey that responsibility to individuals, who in turn enact roles (Biddle, 1986). Organizational roles are specifically designed to place individuals into the structure of the organization, despite their trainings, experience, or background. The job descriptions in many organizations or establishments expressly outline the expectations, and sets strict behavioral boundaries. Participants' responses that early intervention was not emphasized in the treatment of Type 2 diabetes highlighted the fact that although social workers are aware of their role and responsibilities as they pertain to early intervention services, other environmental or contextual factors are exerting an effect on their capacity to successfully do so.

Constructs of the systems theory were also evident in the current study.

Participants' responses provided insights into how the role of social workers in early intervention is inextricably connected to, and influenced by other professionals; as well as by contextual factors within the system. The design of the system impacts the status relations and identity of social workers and consequently, their perception of the role relative to others as part of an interdisciplinary team. The findings on providing flexibility and control for social workers in their treatment settings (and more resources or support to increase the engagement of social workers in early intervention) therefore emphasized working on the overall system. Addressing these contextual factors has the capacity to shape and improve social workers' early intervention efforts.

### **Personal Observations and Reflections**

This section presents a discussion on the saliency of the participants' practice settings and their experiences in providing early intervention services to diabetic clients. Most of the participants worked with different client groups, although all worked in settings where social work services were provided to clients. During the interviews, the participants tended to focus more on their current work roles and responsibilities, and spoke of their experiences in providing early intervention services in a retrospective manner. This was clear during the interviews and from listening to the recordings afterwards, as well as in reading the transcripts and conducting member checks with participants. As stated in the participants' responses in the results, the emphasis given to early intervention and the scope of the responsibilities that social workers had (relative to the provisions for the diabetic client) depends on the agency's overall philosophy and



service delivery framework. Therefore, I felt a need to highlight this significant subtheme, as well as other such narratives that provide an in-depth understanding of the relationship of social workers to their work environment and the various roles they assume within an interdisciplinary treatment team.

Discussing and bringing to light social workers' perceptions of their roles within interdisciplinary diabetes treatment teams is important, because it provides empirical insight into what the participants are doing, how they are doing it, and what areas need to be improved upon. The exploration of social workers' perceptions helps not only by highlighting the significant role(s) social workers play within interdisciplinary teams but also by contributing to enhancing their functioning within these roles and the overall quality of service outcomes. Studying and exploring professional roles within interdisciplinary treatment teams is difficult; however, social workers who are committed to improving the treatment outcomes of the diverse client populations with chronic health conditions should consider engaging in conscious or intentional inquiries within their work setting, to routinely appraise any challenges, so that solutions can be proffered in line with changing trends.

As previously stated, I have experience working with diabetic clients; however, conducting this study was a humbling and enriching experience, in the sense that I had to set aside my experiences and knowledge, and immerse myself in the project. I developed a good rapport with the participants and engaged them to draw out their lived experiences with the general topic under investigation. In my questioning techniques, I focused on the interview protocol to achieve the purpose of this study without probing for responses that

would confirm or disconfirm my personal biases and assumptions. As much as possible, I set aside any judgment of their narratives and the situation specific meanings and instead focused on the general objective of investigation.

Conducting this study was also a humbling experience due to the range of spoken and unspoken emotions that participants exhibited, in response to the questions posed. On occasion, participants would pause and reflect, before speaking with passion about the challenges of the clients or their work with them in general. Having the opportunity to conduct this research has taught me that social workers make invaluable contributions as members of interdisciplinary teams to the achievement of client treatment outcomes and national health standards.

### **Implications for Social Change**

With this study, an improved grasp of the physical and psychosocial complications associated with the early onset of Type 2 diabetes could cause social workers to give due attention to the needs that are associated with such complications. Structured, evidence-based interventions can be developed, to assist social workers and other professionals to empower patients to optimize self-management. At the micro level, such knowledge could assist social workers that provide early intervention services to persons diagnosed with Type 2 diabetes by developing and tailoring trainings that target client self-management or empowerment, to proactively address anticipated physical and psychosocial complications. At the organizational level, greater cognizance of the extensive means organizations control could lead to better treatment outcomes and use of resources.

The findings of this study also give perspective into several ways educational training programs for social workers can be enhanced – through changes in course work or more experiential-based learning. Students’ clinical training such as practicum and internships that provide direct learning experience should include shadowing the activities of health professionals. Coursework should contain assignment and projects that involves working with actual clients with diabetes or other chronic health conditions, and providing reports at the end of the semester. Social workers trained in this manner would likely have more knowledge to provide early intervention factors, reduce the risk factors, minimize the chances of clients developing complications of diabetes, thereby reducing morbidity and mortality in persons with Type 2 diabetes in the society at large.

#### **Implications for Social Work Professional Practice and Training**

The findings of this study also have implications for the practice and training of social workers, particularly via a contribution to literature related to social workers’ role in interdisciplinary treatment teams. This work also provides insights into the perspectives of social workers on their specific roles in facilitating early intervention services for clients in diabetes treatment settings.

In all interviews, participants reinforced the importance of early intervention in diabetes management and the vital role that social workers play in facilitating self-management and improving overall treatment outcomes. Participants pointed out that the provision of early intervention services was not emphasized, and that other members of interdisciplinary treatment teams may not consider social workers to be adequately trained to address clients’ medical and psychosocial needs. Moreover, the findings

suggest the importance of having practical experience, given the diversity in practice settings. The results of this study also present the need for social workers to be aware of their knowledge, skills, and competencies and to consistently appraise how these can be adapted to providing culturally responsive services to socioeconomically disadvantaged clients.

### **Recommendations**

The following recommendations are based on the study findings:

- To ensure social workers' contributions achieve the desired and maximum impact, there is a need to give recognition to our position and empower our members, through the creation of opportunities that foster our ability to deliver our services in the best possible ways.
- Also crucial is more experiential-based learning that provides social workers the opportunity to work with varied client populations within their contexts – outside of hospital and clinical settings, where social workers can immerse themselves into these experiences and see how clients evolve over time.
- Additionally, social work curricula should be revisited, to incorporate advance training in medical conditions, to provide knowledge and competence to work with clients with diverse chronic health conditions.
- Social workers that work in formal organizations should lend their voice to being seen and recognized as significant members of the interdisciplinary treatment teams they work within.

- To address multiple realities, social workers need to discuss the importance of early intervention immediately with clients in their offices, when the clients are referred for psychosocial services.
- Future research should also prioritize a focus on contextual factors (i.e. organizational settings), and how these shape and impact social workers' performance in the different roles that they perform in early intervention services.

### **Strengths and Limitations**

A significant strength of this study was its ability to address the gap in knowledge that pertains to social workers' role in early intervention with diabetic clients. This study contributes to existing social work literature by exploring previously unexamined phenomena. Furthermore, an interpretivist-constructivist approach was adopted, which provides participants' assessment of the situation and/or an explanation of their experiences with the phenomenon examined. This approach produced a well-rounded summation of their lived experiences in providing social work services to clients diagnosed with diabetes.

Despite the foregoing, this research also had its limitations; mainly being the subjective nature of the responses. Participants may have responded in a socially desirable way or inaccurately self-reported. Another limitation was the sample size, which prevents the findings from being generalizable. Finally, differences in hospital policies and procedures relating to the treatment of persons with diabetes may have also impacted respondents' views.

## Conclusions

The results of the present study extend social workers' understanding of their role and duties in early intervention with clients with Type 2 diabetes. However, a more expansive design, which compares perspectives between social workers and other members of the interdisciplinary team, could shed light on the phenomenon examined. Future research should also focus on the contextual factors such as client environment and behavior, and how they shape and impact social workers' performance in the different roles that they perform in early intervention services. Perhaps, it will also be interesting to examine other professionals within the interdisciplinary team that are currently functioning in the roles that social workers traditionally perform, and interrogate if and how this impacts self-perception of social workers, particularly in line with their ability to effectively deliver early intervention services.

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### Appendix: Interview Questions

1. At what point in the provision of psychosocial services for persons diagnosed with Type 2 diabetes is the treatment considered early intervention?
2. How do you think it matters for early intervention in the provision of psychosocial support or services for persons diagnosed with Type 2 diabetes?
3. What are your opinions regarding the importance of self-management, access to community organizations or resources, and dealing with emotional and social problems in persons diagnosed with Type 2 diabetes?
4. How do early interventions relate to self-management, access to community organizations or resources, and dealing with emotional and social problems?
5. What are your opinions regarding your role in facilitating early interventions that target self-management in persons diagnosed with Type 2 diabetes?

**Elaboration probe:** Could you give me some specific tasks that social workers in your organization perform that facilitate early interventions that target self-management for persons diagnosed with Type 2 diabetes?

**Elaboration probe:** Is there anything else you would like to add?

6. Describe your role as a social worker in facilitating early interventions that focus on linking clients with community organizations or resources for persons diagnosed with Type 2 diabetes.

**Elaboration probe:** Do you think that the services that you provide sufficiently address the early intervention needs of persons diagnosed with Type 2 diabetes?

**Elaboration probe:** How important is it for client's treatment that you are able to link them with community organizations or resources early in the treatment process?

**Elaboration probe:** Is there anything else you would like to add?

7. When providing early intervention services for persons diagnosed with Type 2 diagnosis, what is your role in addressing problems issues with emotional and social support for clients with Type 2 diabetes?

**Elaboration probe:** Could you give me some specific tasks that social workers in your organization perform that facilitate early interventions that target issues with emotional and social support for clients with Type 2 diabetes?

**Elaboration probe:** Is there anything else you would like to add?

8. How could social workers be engaged more effectively to facilitate early interventions that target self-management, linkage with community organizations or resources, and problems issues with emotional and social support for clients with Type 2 diabetes?

**Elaboration probe:** Is there anything else you would like to add?