Health Education and Health Promotion (HEHP) (2013) Vol. 1 (3, 4): (73-85)

Diabetes Control Experiences Among the Syrian Females; A Qualitative Research

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Received: 12/11/2013 Accepted: 22/09/2014

Abstract

Aim: The aim of this study was to explore the experiences of the Syrian type 2 diabetic females and the way they control it.

Methods: A qualitative design based on the content analysis approach was used to collect data and analyze the females' experiences with type 2 diabetes. Semi-structured interviews carried out with 12 females who had visited the Diabetic Center in Lattakia from March to December 2011.

Finding: Seven major themes emerged out of the study as strategies for diabetes control: responsibility taking, illness confirmation, acquiring diabetes knowledge, self-care, socio-family support, hopefulness and religious beliefs.

Conclusion: The findings of the study can be used to empower Syrian diabetic population and can provide nurses and other health professionals with more profound understanding of how the Syrian with diabetes view their lives and their sources of strength.

Key words: Type 2 Diabetes, Control, Females, Qualitative Research, Syria

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Introduction

Diabetes is a growing health problem (Nathan et al., 2009). It has been estimated that 366 million people suffered from diabetes in 2011; this will increase to 552 million worldwide by 2030 (International Diabetes Federation, 2011). In fact, diabetes is an epidemic in Asia, with more than 110 million individuals currently living with diabetes (Yoon et al., 2006; Chan et al., 2009). The majority of this population will contribute to the risk of disease and healthcare burden (Huang et al., 2010). The increasing prevalence of the diabetes mellitus in spite of massive campaigns necessitates a careful look into the matter.

Literature Review

Several studies investigated metabolic control and the majority of them reported that various factors affect people's adherence to their management plan to achieve diabetes control. Unfortunately, many of the studies have been conducted in the western countries particularly in the USA. The findings showed that many factors affect adherence to treatment regimens: communication with the healthcare providers, knowledge of diabetes and consequences of the weak glycemic control (Matthews et al., 2009). Moreover, they proposed that a patient's subjective life experiences and individual cultural contexts are important factors in achieving a comprehensive picture of control and self-monitoring type 2 diabetes (Song & Lipmann, 2008).

World Diabetes Foundation (2008) declared that diabetes affects females severely because of their specific biological, cultural and socio-economic circumstances. That is why females were chosen as the focus of our study.

Background in Syria

In fact, there are very few studies on the experiences of the Syrian females with diabetes. The Syrian studies showed that type 2 diabetes is a major public health problem and considered the most prevalent chronic disease in Syria (Shaban, 2003; Ohanian & Aljabi, 2008). Furthermore, Albach, (2001) introduced the prevalence of type 2 diabetes seems to increase after the age of 50. Moreover, while great efforts are currently being exerted by the respective health bodies in Syria to provide insulin and render free treatment at hospitals, diabetes education is still insufficient. So that, insufficient education besides lack of diabetes control and follow-up by the patients are main causes of high rate of complications in Syria. Diabetes education must be developed to cover a larger diabetic population and provide them with optimal medical healthcare. The Syrian National Diabetes Program was implemented in 1995 to address the diabetes problem. One of its

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aims was to establish diabetes centers in every town in Syria in order to provide education and treatment. There are currently 156 such centers throughout Syria. People are treated free of charge in these centers (Albach, 2001).

According to the findings of the previous studies, we need to understand the diabetes experiences from a Syrian perspective to empower their diabetes control and avoid its complications. So, this study was conducted to explore the experiences of Syrian females living with type2 diabetes and the way they control it.

Methods

Design

Qualitative design is a way of understanding a person's experience, from his or her point of view (Streubert & Carpenter, 2003). A qualitative design, based on the content analysis approach, was used for data collection and analysis of the females' experiences on diabetes control in Syria.

Participants

The study was conducted at the Diabetes Center in Lattakia, Syria. About 11000 patients visit the Diabetes Center annually containing about 800 with diabetes type1 and 10200 (4200 males and 6800 females) with type2 diabetes (Ministry of Health, 2010). A purposeful sampling method was used to recruit 12 females with type2 diabetes who were visiting the Diabetes Center of Lattakia, Syria. The head nurses of the Diabetes Center assisted us in identifying and recruiting the participants. The inclusion criteria were: middle-aged females (40-65 years), willingness to be interviewed, the ability to talk and explain their experiences and being diabetic at least 2 years. Sampling was based on a maximum variant approach in terms of education level, marital status and age. This sampling strategy enabled the researchers to capture a vast range of views and experiences (Streubert & Carpenter, 2003). The participants' age range was between 40 and 65 years. One of them was unmarried and one was divorced. Four had an academic degree, 2 had completed secondary school, 2 had completed primary school, and four were illiterate. Four of them were housewife and one was retired. The duration of participants' diabetes experience was between 4 and 23 years.

Ethical considerations

Ethics Committee of Medical Sciences Faculty, Tarbiat Modares University Approved the study to be conducted. Official permission was also obtained from a Diabetes Center of Lattakia city to conduct the study. Potential participants were informed of the purpose and design of the study, voluntary nature of their participation, and that they could withdraw at

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any time. It was mentioned that their confidentiality would be kept. Furthermore, permission for digital recording of the interviews was obtained participants.

Data Collection

Participants were chosen by the first author in the place chose. The mean duration of the interviews was 30 min. An interview guide of semi-structured questions was used to elicit data, so that the question types and topics could change according to goals, the participants' experiences and the issues raised by the previous interviews. The participants were encouraged to express their experiences and provided with sufficient time to do so. Probing questions were also used during the interviews to improve the depth of data collection. Once the themes were identified and information saturation was achieved, the interviews were discontinued. Data collection and analysis processing were carried out from March to December 2011.

Data Analysis

The interviews were audio-recorded and transcribed verbatim and analyzed using the content analysis method concurrently with the data collection (Sandelowski, 2000). Coding was carried out line by line, and comparative analysis of the excerpts carried out. In the first phase, categories and themes in the data were identified and grouped into domains. The coding process was iterative, and categories and themes evolved (added, deleted and merged) as re-readings were completed and analyses progressed. In the second phase, the categories and domains were regrouped into major themes. Regarding trustworthiness, credibility was established through member checking, peer checking. Member checking was done by asking the respondents to verify the preliminary findings from the earlier interviews.

Rigor

In our study, credibility was established through the participants' review of transcripts and peer check. The participants were contacted after the analysis and were given a full transcript of their coded interviews with a summary of the emerged themes to determine whether the codes and themes were true to their point of view (member check). To establish audit-ability, a second review was conducted by the nursing faculty members. The findings were checked with some individuals who did not participate in the research to confirm their fitness (peer check).

Findings

Seven major themes emerged as strategies to diabetes control: responsibility taking, illness confirmation, diabetes knowledge, self-care,

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socio-family support, hopefulness and religious beliefs.

Responsibility Taking

The findings indicated that because diabetes is a chronic disease, it requires lifetime commitment to healthy behaviors. Therefore, most of the responsibility for diabetes control lies with the patients themselves who must follow a prolonged diet regimen, exercise and medications. Many females in this study pointed to their responsibility for daily management of their disease. Moreover, they added that subjective diabetes control remains the major objective to prevent damages to body organs and other complications arising from the effects of having type2 diabetes;

"To prevent diabetes complications, no one can take care of me like myself; therefore, I need to take care of myself by myself (a 45-year old woman). Some participants responded: "If something is related to my health and future, I have to take care of it, because I think I am responsible for my health" (a 52-year old woman).

Illness Confirmation

The findings of this study showed that accepting one's illness helps individual to achieve control over diabetes. Many females viewed their illness confirmation as a guide for living with diabetes and a key for control. Those who accepted diagnosis felt responsible for their diabetes and tried to undertake self-care;

"Really, I'm afraid of diabetes complications. If I don't accept my illness as reality in my life, I will not take care of myself and I will be dependent on my family and others. So, I have to accept my illness, take care of myself and I do it" (a 46-year old woman).

Other females mentioned that people with diabetes realize that they have to accept the illness as part of their life because they could not change their situation:

"At first, I didn't accept the diagnosis of diabetes but then I found that I have to accept it as a fact. It is part of my life. I didn't choose it. It is there and I have to accept it" (a 55-year old woman).

Diabetes Knowledge

In our study, knowledge of diabetes was an important factor in controlling the disease. Many females clarified that prior to diagnosis; they had limited knowledge about the diabetes. They got the knowledge in different ways including personal experience of the symptoms and other sources such as family, friends, community and media; "I didn't really know so much about the significance of the problem, but I've been informed that exercise is important so I did it" (a 45-year old woman).

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Other females were more attentive to what was written about diabetes. Moreover, they expressed concerns about their knowledge of regimen recommendations. They also expressed that they were aware that they did not know everything about diabetes but were accustomed to seek further information: "I read a lot about it. It's my attitude toward it and I am trying to learn more about it" (a 52-year old woman). "I like to get more information about my illness. Why did my blood sugar increase or decrease? I think that more information is required for better adherence to my treatment plan" (a 57-year old woman).

Self-care

The participants in the current study understood that they needed to change their life style. They began to take care of themselves through choosing healthy foods, exercising regularly, taking care of their feet and monitoring their blood glucose: "I do not want to neglect myself. I can improve my safety when I understand my reactions better. Now I can measure my blood sugar level and take care of me" (a 45-year old woman).

It is very important to mention that nearly all participants declared that they have tried to follow a diet plan and regular exercises. On the other hand, many participants argued that since most of them were mothers and had many children, difficulty in balancing the family and work responsibilities and the life's unfriendly circumstances was the main cause for their non-adherence to long life medication regimens: "The main problem of mine was time. I had 6 children; and balancing the caretaking of myself and my family as well as other responsibilities were just constantly tugging at me" (a 52-year old woman). "My circumstances were too difficult; I was responsible for my populated family and taking care of my children was a time consuming activity. Therefore, I had no opportunity to take care of myself continuously. Thus, I have many complications" (a 57-year old woman). "I have not taken care of myself because my children are little and they take all my attention and time" (a 55-year old woman).

Socio-Family Support

The findings clearly showed that diabetes control is a multi-facet issue and diabetic people are depended on the others' support. All participants in this study emphasized the importance of family relations and highlighted the importance of having at least one family member who provides support: "My family is the most supportive source, especially my daughter who gives me attention" (a 49-year old woman). "I realized that the support I got from my family is the most valuable thing to me" (a 57-year old woman).

Moreover, the participants mentioned that

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relations with peers ensured that they were not alone and consequently helped them confirm their disease: "Communicating with other diabetic individuals is of great importance, because one can share his or her experiences and prevent from feeling loneliness" (a 60-year old woman).

Hopefulness

The females in our study also expressed hope for good life without diabetic complications, although they were aware that the disease may cause many complications and death: "I hope that I'll get rid of diabetes' complications and get more control on my illness because God helps me" (a 61-year old woman). "Really, I'm not afraid of the future. I am sure that everything depends on God's will" (a 55-year old woman).

Religious Beliefs

The current study revealed that faith in God can help people take greater control over their lives. Some participants saw their life as a divine gift; therefore, they tried to save their body for gratitude and respect to God: "When God gives me a nice body, so I am responsible for saving the gift. I have to take care of myself" (a 57-year old woman).

Furthermore, the participants felt that their relation with God was very vital for them concerning the diabetes compromise. They believed in God and derived a great deal of strength from this. It was also a core aspect of control: "I have lived with diabetes for 17 years and believe that only God supports me. My life is in his hands" (a 61-year old woman).

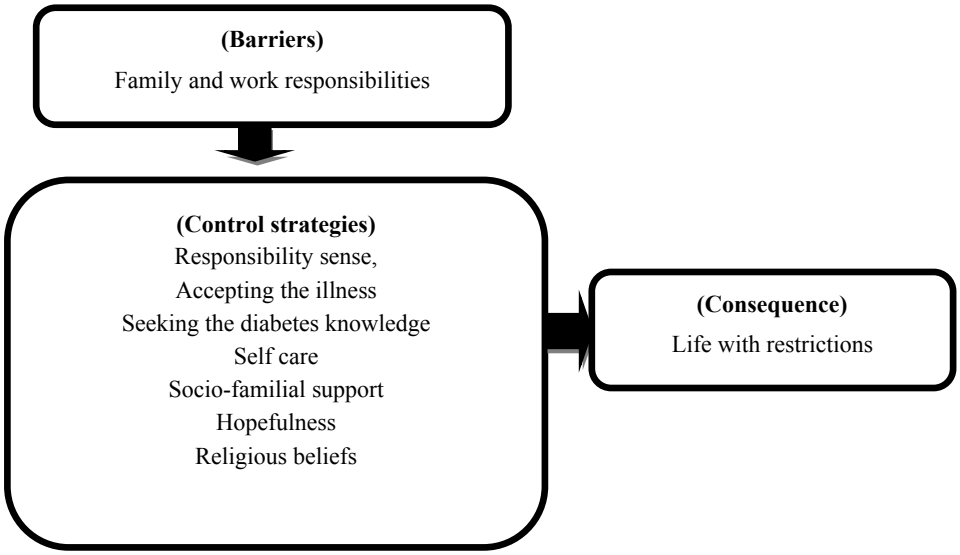


Figure 1 Diabetes control experience in Syrian women

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Discussion

This study explores diabetes control experiences among Syrian females who feel responsibility, confirm the illness, and seek the diabetes knowledge, self-care, socio-family support, hopefulness and religious beliefs as their main strategies to control diabetes. (Fig. 1)

The participants in our study showed that the responsibility feeling is of great significance to achieve control over the disease. This finding is confirmed by another study(Funnell & Anderson, 2004) reporting that the patients must be able to set goals and make frequent daily decisions to manage diabetes successfully; it is thus necessary for them to understand their conditions and learn how to manage (Funnell & Anderson, 2004). This makes patient education an essential part of diabetes care (Van Dam et al., 2003).

Furthermore, the participants found that confirming the illness is the main step in their disease control. This finding is consistent with that of Bulsara et al. (2004). They suggested that confirming the diabetes helps people easily cope with the things they cannot control and set viable goals.

Moreover, our study indicated that Syrian health professionals provide common clinical care rather than education and counseling services; therefore, people with diabetes often use trial and error to manage their diseases. The findings highlighted the fact that diabetes awareness is also influenced by mass media programs and living with diabetes experiences. Many studies asserted that knowledge about diabetes plays a central role in diabetes control (Matthews et al., 2009, Onwudiwe et al., 2011). Adolfsson et al. (2008) emphasized that knowledge about what happens in the body, long-term complications, diet, physical activities and blood sugar is fundamental to people with diabetes. Diabetic individuals are generally hungry for learning about their disease as the main factor to enhance diabetes control process (Abdoli et al., 2008). Therefore, Syrian Diabetes Center and mass media cooperation in providing educational programs emphasizing on lifestyle modification and adherence to treatment regimen would be of great benefit for diabetes control.

Females in our study described that they have changed their lifestyle as main step toward self-care. This finding is congruent with other researches, implying that diabetes self-care focuses on lifestyle changes (Adolfsson et al., 2008; Whittemore et al., 2005). In addition, many participants in our study discussed the challenge of integrating diabetes management control, family and work responsibilities. They pointed to time limitations in balancing family and job responsibilities. They also indicated

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that motherhood role and the related responsibilities provide them with stress and inability to take care of themselves. Our study highlighted the fact that the Syrian females' culture concerning the sense of duty to meet family needs first was a strong barrier in this regard. In other words, taking care of children is more important than taking care of herself for a mother. This finding is consistent with the findings of other studies (Savoca et al., 2004). Furthermore, Finucane and McCullen (2008) identified that balancing family and work responsibilities may complicate diabetes control because they create obligations and restrictions for the infected mothers. Diabetic females who cared for populated family reported the greatest stress for controlling their illness (Samuel-Hodge, 2000). Understanding the patients' circumstances by the health professionals would assist them to achieve easy diabetes control at their own pace and in the context of their culture and world view.

Each woman in the current study identified at least one significant person who was important to her disease control. Most spouses and daughters were willing to shoulder the responsibility. In particular, females relied on their daughters. Strong support from daughters appears to be rooted in the Syrian culture because they believe that their daughters are more kind and compassionate than their sons. This finding is consistent with other researches which suggest that enhancement of family and social support will help the diabetic individuals solve the related problems (Hammouda, 2011). Family should support such a person through being attentive to his or her self-management wishes and needs (Moser et al., 2008). Social support is considered as a significant health-promoting factor associated with better blood sugar control and adherence to self-care regimens (Bulsara et al., 2004; Rakel & Weiss, 2007). A diabetes support group consists of other people with diabetes can be developed to provide the patients with advices (Huang et al., 2010). Another research suggested that lack of emotional support may cause the patients burn out which in turn results in poor glycemic, a sense of weakness and discouragement about the disease, fear of its long-term complications as well as the attendant frustration (Rakel & Weiss, 2007). Thus, it is a must for health professionals to understand the psychosocial needs of the diabetic individuals and provide them with suitable social support including peer group support.

In addition, our findings showed that personal and cultural beliefs influenced the participants' sense of control and hope. According to our study and based on the Syrian culture, assuming that life is a divine gift affects the people in move towards the empowerment

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process and diabetes managing. Some participants stated that 'man' is responsible for his body; because it is a God's gift. Therefore, it is an obligation to try to save bodies through take caring of the daily life and controlling diseases. This involves being conscious about symptoms; that is why people seek health professional advices when they feel sick. They also pointed out that their religious beliefs helped them reframe their diseases in a positive and hopeful way. Thus, religious beliefs have an important role in creating a positive outlook and maintaining hopes (Gurm et al., 2008). At the same time, good future expectation is a major factor in resorting to diabetes control (Bulsara et al., 2004). Furthermore, research conducted in Iran and UAE suggest that the patients' religious beliefs gave them the inner strength to confirm their illness, take responsibility for their disease and control it (Abdoli et al., 2008; Laymyian et al., 2007; Bener et al., 2002). Similarities among the findings of the Middle East studies and ours are mainly due to cultural and religious (Islamic background) tendencies. Consequently, faith can be encouraged and supported by the healthcare system as a facilitating factor if health promotion messages are tailored according to the Islamic beliefs among the Syrian females.

Limitations of the Study

Despite the mechanisms applied to enhance the rigor of the study, some limitations may be inherent. The sample size was small and the context confined to a particular geographic location.

Conclusion

The findings of the study can be used to empower the Syrians to encounter diabetes and provide nurses and other health professionals with a more profound understanding of how the Syrian people with diabetes view their lives and their sources of strength. The health professionals should be more responsive to the patients' needs, preferences and delivering high quality health services through strengthening their own roles in managing diabetes.

Acknowledgements

We sincerely appreciate all individuals participated in this research. The budget for the research has been provided by Tarbiat Modares University, Tehran, Iran.

Contributions

Study Design: SZ, MA and FA
Data Collection: SZ
Data Analysis: SZ, MA and FA
Manuscript Writing: SZ, MA and FA

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