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Facilitators and barriers of adaptation to diabetes: experiences of Iranian patients

Hossein Karimi Moonaghi[1], Hossein Namdar Areshtanab[1*], Leila Jouybari[2], Mohammad Arshadi Bostanabad[3] and Heather McDonald[4]

Abstract

Background: Diabetes mellitus is one of the most challenging and burdensome chronic diseases of the 21st century and More than 1% of the Iranian urban population older than 20 years develops Type 2 diabetes each year. Living with diabetes mellitus has been described as a dynamic personal transitional adaptation, based on restructuring of the illness perceived experience and management of the self. Adaptation to Type 2 Diabetes mellitus is an integral part of diabetes care.
This study explored the experiences of facilitators and barriers adaptation to Type 2 Diabetes by Iranian patients.

Methods: This study was conducted by using qualitative content analysis. Data were collected via in-depth, semi-structured and face to face interviews with 15 patients with type2 diabetes.

Results: Three themes emerged from collected data, including a) individual context with Beliefs, personal background, and previous experience subthemes. b) supportive system with Family, Society and Health organizations subthemes and c) self-comparison with comparison with other diabetes and comparison with other diseases subthemes.

Conclusions: Identifying and managing Facilitators and Barriers adaptation to Type 2 Diabetes mellitus are an integral part of diabetes care. This study provides a better understanding of the factors from perspective of patients and it can be utilized by health care providers to adapt their health care and education contents to better meet the needs of people with diabetes.

Keyword: Diabetes melitus, Psychological adaptation, Qualitative research

Introduction

Diabetes mellitus is one of the most challenging and burdensome chronic diseases of the 21st century, and it is a growing threat to the world's public health [1]. Diabetes mellitus currently affects about 285 million adults worldwide, and this figure is expected to rise to over 400 million adults by 2030 [2]. It is forecast that by 2030, 77.6% of diabetic patients will be from the developing countries [3]. Diabetes has increasingly become a great concern in the developing countries and Iran is no exception. Type 2 diabetes mellitus, a form of diabetes that is typically acquired in middle aged or older people, accounts for over 90% of all cases of diabetes [4]. The prevalence of type 2 diabetes is reported to be 1.3 to 14.5% in Iran [3]. The chronic nature of the disease and the severe complications result in pronounced lifestyle disruption, challenging psychosocial adjustment for the individual and substantial healthcare expenses [5].

Chronic illness acts as a stressor and initiates coping which can either contribute to or hinder adjustment [6]. Psychological, emotional, and social factors play important roles in chronic illness outcomes [7]. After the medical diagnosis of chronic illness [e.g., diabetes], patients are confronted with new situations that challenge their habitual coping strategies and go through a process of psychosocial adaptation [8]. The potential barriers to healthy coping are numerous. Some of them consist of low social support, financial stress or constraint, external locus of control, lack of access to providers and diabetes educators, low problem-solving ability [7].

* Correspondence: namdarah871@mums.ac.ir
[1]Department of Post Graduate, Faculty of Nursing and Midwifery, Mashhad University of Medical Sciences, Mashhad, Iran
Full list of author information is available at the end of the article

Living with diabetes mellitus has been described as a dynamic personal transitional adaptation, based on restructuring of the illness perceived experience and management of the self. This means dealing with disabilities and limitations paired with a search for life meaning and realistic acceptable identities, that is, separating the person of the past from the person of the present, one that has to overcome personal and social adaptation process to diabetes [9]. Several studies investigated facilitators and barriers to management and adaptation to diabetes [10-15]. Cultural traditions and norms present in all populations, influence on practices of management and adaptation to disease [16].

The majority of studies are based on studies conducted in western societies that differ in terms of cultural and social backgrounds from the Eastern societies. Also the studies have shown that sociocultural content and belief systems could influence patients' experiences in coping and adaptation to the illness [17,18]. The objective of our study is to explore the facilitators and barriers in adaptation to Type 2 diabetes mellitus among Iranian patients with using qualitative research methods. This methodology will allow us to gain deep knowledge about complex phenomenon Through exploring the experience and perceptions of those living with diabetes.

Methods

The Ethics Committee of the Mashhad University of Medical Sciences approved this study. All participants were given oral and written information about the study, after which they consented to participate.

A qualitative study with a content analysis approach was used for the data collection and analysis. Qualitative research aims to explore, provide deep knowledge and understanding of the complex phenomenon under study that are encountered by clinicians, healthcare providers, policy-makers, and consumers in the healthcare system [19]. Qualitative content analysis focuses on the contextual meaning to "provide knowledge and understanding of the phenomenon under study [20].

Criteria for enhancing the rigor of qualitative studies have been proposed by Lincoln and Guba [1985] and include credibility, transferability, dependability and confirmability [21]. In the research process, researchers allocated sufficient time for data collection and have close communication with participants. The interviews returned the participants for verify the accuracy of results and validate the congruity of findings with their experiences. Member checking and ensuring that the researcher was represent their ideas. The data were coded and categorized independently by the authors and then emerged themes were compared. Opinion of experts and three PhD Candidate of nursing in data analysis as peer checking were used and discussed over a 2-week period. Regarding rigor, research team discussed and interpreted the findings until agreement was reached. These items enhanced the credibility of data. To increase the dependability, one of the researchers collected and analyzed the data and the other researchers checked and verified the results. Participants were selected by considering to maximum variation in terms of gender, age, previous experience of illness in family economic status, educational, job background and need or lack of need to injection of insulin to provide transferability.

Data collection and analysis

Participants

Purposive samples of 15 patients were recruited. Patients were selected on the basis of the following inclusion criteria: willingness to participate in the study, a confirmed diagnosis of type 2 diabetes, passing at least 1 year after diagnosis of diabetes, awareness of their diagnosis and cognitively and physically able to participate in the study.

Data were collected via in-depth, semi-structured and face to face interviews conducted from September 2011 to August 2012. All interviews were private and conducted at the participant's discretion with regard to place and time in Diabetes Association of Iran - Tabriz Branch.

The interviews were conducted in Persian by correspondence author. Each participant was interviewed only once .The analysis was conducted in Persian, and for the purpose of this article, translated into English. The interviewer asked the participants about their experiences of living with diabetes. The interviews were tape recorded and transcribed verbatim. The first interviews lasted 60–80 min and the next interviews lasted 40–50 min (mean time 45 min).

The analysis of collected data began once the first interview had been conducted and transcribed. Data were analyzed using qualitative content analysis techniques inspired by Graneheim and Lund man [22]. The analysis began by reading through each interview several times to obtain a sense of the whole of participants' experiences. Then, the meaning units, which were words, sentences or paragraphs, that depicted important aspects of participants' experiences of living with diabetes, were highlighted. These meaning units were then condensed to shorten statements that retain the content. In the next stage, these condensed meaning units, or codes, were abstracted from each interview transcript. Finally, using comparison, reflection and interpretation, these codes were grouped into categories and subcategories by the first three authors. Data collection continued until data saturation was reached. That is, data collection had gone on up to when no new code emerged from analysis of the data.