

Struggling Towards Diagnosis: Experiences of Iranian Diabetes

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Background: Healthcare-seeking behavior is one of the factors determining the uptake and outcome of healthcare. However, few studies have discussed how and why diabetics seek healthcare assistance before meeting a physician.

Objectives: In this study, we explored the subjective experiences of healthcare-seeking behavior among Iranian patients with type 2 diabetes mellitus.

Patients and Methods: A qualitative approach was adopted using a conventional content analysis of semi-structured interviews carried out in the Diabetes Association in Tabriz (Iran) with 15 participants suffering from type 2 diabetes. Participants were recruited by the purposeful sampling method.

Results: Five themes emerged from the study: 1) warning by physical signs; 2) personal processing; 3) self-remedy and its outcomes; 4) seeking information, and; 5) diagnosis and verification of information by healthcare staff.

Conclusions: Individual social context plays an important role in the decision-making process when seeking healthcare for diabetes. The results of this study can be utilized by healthcare providers to facilitate interventions to increase diabetics' active involvement in their healthcare, and encourage a wider knowledge of its symptoms and outcomes to facilitate appropriate healthcare-seeking and service use.

Keywords: Diabetes mellitus; Healthcare-Seeking Behavior; Qualitative Research

1. Background

Diabetes mellitus is one of the most challenging and burdensome chronic diseases of the twenty-first century, and will continue to be considered a growing threat to the world's public health (1). Diabetes mellitus currently affects around 285 million adults worldwide, and this is expected to increase to over 400 million adults by 2030 (2). Type 2 diabetes mellitus is responsible for over 90% of all cases of diabetes (3). Most new cases of diabetes arise in developing countries. It seems that among the regions, the Middle East will have the largest increase in the prevalence of diabetes by 2030. According to previous studies, the prevalence of the condition in the Iranian population is around 8.7% of those aged 25-64 years old (4).

An integral part of diabetes care is the identification and management of healthcare-seeking behavior in these patients. Healthcare-seeking behavior can occur with or without a health problem, and covers a spectrum from potential to actual health problems. The negative impact of delayed help-seeking behavior include late diagnosis, delayed treatment and poor outcomes (5). Healthcare-seeking behavior is not just an isolated event: it is part and parcel of personal, family and community identity

that results from an evolving mix of personal, social, cultural and experiential factors. The process of responding to illness and seeking care involves multiple steps (6). Healthcare-seeking behavior is important, because it is one of the factors determining the uptake and outcome of healthcare. It concerns factors that enable or prevent people from making health choices in relation to their lifestyles and adoption of medical care (7).

Healthcare-seeking behavior is influenced by peoples' perceptions about a disease within the context of traditional and cultural beliefs and attitudes (8). Seeking information about one's health is increasingly documented as a key coping strategy in health-promotion activities and in the psychosocial adjustment to illness (9). Designing healthcare policies and programs requires knowledge about healthcare-seeking behavior, so that potential hindrances to early diagnosis and effective treatment can be identified and appropriate interventions implemented. Early recognition of symptoms, preparation of healthcare facilities and compliance with effective treatment can reduce morbidity and mortality (10).

Culture shapes interpretations of symptoms, self-definition, and self-treatment of illnesses based upon prevalent

cultural beliefs as to their causes and treatments (11). The majority of studies of diabetes have been made in other cultures, the findings of which cannot be applied to various other cultural healthcare settings (8, 12, 13). On the other hand, limited information has been established as to healthcare-seeking behaviors among diabetics, while the research available has not focused primarily on developing countries (12).

2. Objectives

Because few studies have investigated healthcare-seeking behavior in Iranian diabetics, it is necessary to study how patients with diabetes behave in relation to their health-related problems. Therefore, the aim of this study is to explore the experiences of Iranian diabetics in relation to healthcare-seeking behaviors.

3. Patients and Methods

In this study we used a qualitative approach with a content analysis method for data collection and analysis. The aim of this qualitative study was to explore, provide and understand the complex nature of under study phenomenon which clinicians, healthcare providers, policy-makers, and consumers are encountered with, in healthcare system (14). Qualitative content analysis focuses on contextual meaning to provide a deep knowledge and understanding of under study phenomenon (15).

A purposive sample of 15 patients was recruited. Patients were selected on the basis of the following inclusion criteria: willingness to participate in the study, confirmed diagnosis of type 2 diabetes, awareness of diagnosis, and diagnosed with type 2 diabetes at least one year prior, and cognitively and physically able to participate in the study. Data were collected via in-depth, semi-structured and face-to-face interviews after confirmation of the research project and approval of the Ethics Committee at Mashhad University of Medical Sciences (No. 900603).

The interviews with the participants were performed between September 2011 and August 2012. All interviews were private and conducted at the participant's discretion with regard to place and time at the Diabetes Association of Iran (Tabriz branch). Participants read and signed an informative consent form that permitted the researcher to audio-tape the interviews. All participants were assured as to the anonymity and confidentiality of the gathered data. They were also informed of their right to withdraw from the study at any time. The interviewer asked participants to share their experiences of living with diabetes in these interviews. The interviews were recorded and transcribed verbatim. The initial interviews lasted 60-80 minutes while the later interviews lasted 40-50 minutes (mean time 45 minutes). Data collection continued until data saturation was achieved. That is, data collection had continued until no new codes emerge from data analysis. In the study, data saturation was achieved gradually after conducting 12 interviews.

The MaxQDA version 2 software package was used in order to handle and organize the data.

Samples of interview questions asked include the following:

1. Can you tell me about your experience of the beginning of your illness?
2. When did you feel that you needed to seek help and guidance?
3. How do you acquire relevant information about diabetes?

Once the first interview was conducted, interview analysis was performed and transcribed. The data were analyzed using qualitative content analysis techniques

Table 1. Socio-demographic and Clinical Characteristics of Participants

Variable	Value ^a
Gender	
Male	9 (60)
Female	6 (40)
Age, y	50.86 ± 9.26
Marital status	
Married	13 (86.6)
Single	1 (6.7)
Widowed	1 (6.7)
Employment	
Unemployed	3 (20)
Employed	7 (46.7)
Retired	5 (33.3)
Education level	
Illiterate or less than diploma	6 (40)
Diploma	3 (20)
Graduate	6 (40)
Type of treatment	
Oral medication	9 (60)
Insulin	0
Both medications	6 (40)
Insurance	
Covered	15 (100)
Not covered	0
Income	
Low	5 (40)
Medium	6 (33.3)
High	4 (26.7)
Duration of diabetes, mo	10.26 ± 7.07 (1-25)
Family history	
Yes	9 (60)
No	6 (40)

^a Data are presented as Mean ± (S.D) or No. (%).