



A Life-Long Disease: Diabetes

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ABSTRACT

Aim: This study is a qualitative study planned to reveal the feelings, thoughts and experiences that the diabetic patients experience in their disease processes, to determine what the disease means for them and to reveal ways to cope. **Method:** 20 patients, who were hospitalized with diagnosis of diabetes for treatment at the Endocrinology and Metabolic Diseases Clinic of Gülhane Education and Research Hospital, were included in the study. In-depth interviews with patients were conducted to collect data. A semi-structured questionnaire aimed at revealing the ages and genders, as well as the feelings, thoughts and experiences of the diabetic patients was used in the interviews, which lasted approximately 45 minutes. Individual interviews were held in each patient's own room. Before conducting the interview, the clinic staff was warned about the interview with the patient, and the measures were taken to ensure that the interview was not split. All interviews were recorded with the patient's permission and the recorded interviews were transferred into text as the same. The descriptive analysis method that is frequently used for analysis of data in the qualitative researches was used. **Results:** 7 of the patients participating in the study were males and 13 were females. It was determined that 45% of the patients were between 60-69 years of age, 85% were married, 60% lived with spouses and children. It was detected that the patients had diabetes for an average of 16,55 years and 90% received insulin + oral anti-diabetic treatment. As a result of the qualitative analysis of the patient interviews; the 5 (five) main themes were identified as "meeting with diabetes", "difficulties in living with diabetes", "fears caused by diabetes", "coping with the diabetic life", and "future with diabetes". **Conclusion:** As a result, it is thought that it is important not to consider diabetes as only a physical disease, in addition, the subjects such as emotional reactions, perception of the disease, and life challenges should be evaluated by the health professionals in order to improve diabetes compliance.

Keywords: Diabetes, Coping, Patient experience, Qualitative study

INTRODUCTION

Diabetes is a serious and life-long disease, whose prevalence gradually increases, which threatens health and causes many chronic complications endangering the life when not properly managed. Diabetes is also an important public health problem that causes many burdens to the patient, his/her family in physical, emotional, and social aspects throughout life [1]. According to the data of the World Health Organization; while the number of diabetic patients was 108 million in 1980, the number of diabetic patients reached 422 million in 2014. The adult population in the world has a diabetes rate of 8.5% and the number of diabetes-induced deaths in 2012 is 1.5 million [2]. The World Health Organization has reported that diabetes is among the world's leading causes of death in the 2013-2020 global

action plan on prevention and control of non-communicable diseases, a target of reducing diabetes-related deaths by 25% [3].

As with all chronic diseases, the diabetic individuals also face the challenge of adapting to a new life. In addition to the fact that diabetes itself is a stress factor as a disease, many lifestyle changes that must be complied with cause intensive anxiety for the diabetic individuals [4]. Along with the diagnosis of diabetes, many new stimuli such as being more attentive about food intake, the need for physical activity, a treatment program to be followed, and control of blood glucose level are being faced. The diabetic individuals often waver between the new experiences, which they need to obey, and the regret for what they did not do during pre-diabetes periods. This period, in which they question themselves, causes emotional difficulties and worries. For this reason, it is a predictable situation that the diabetic individuals can experience psychosocial adjustment problems, and it is a matter that should be considered by a treatment team.

This study was planned to reveal the feelings, thoughts, and experiences that the diabetic patients experience in their disease process, to determine what the disease means for them and to reveal ways to cope.

METHODS

Study design

The research was conducted using a phenomenological approach, which is one of the qualitative research designs. The demographic characteristics of the patients, a data collection form containing information about the disease and semi-structured interview questions were used to reveal the patients' experiences. The collected data were analyzed using Colaizzi's phenomenological interpretation method.

Participants

Twenty patients, who were hospitalized with diagnosis of diabetes for treatment at the Endocrinology and Metabolic Diseases Clinic of Gülhane Education and Research Hospital, were included in the study. Participants are those patients, who are 18 years of age or older, and who have been diagnosed with diabetes for at least 1 year and who agree to participate in the study.

Data collection

In-depth interviews with patients were conducted to collect data. A semi-structured questionnaire aimed at revealing the feelings, thoughts and experiences of the diabetic patients was used in the interviews, which lasted approximately 45 minutes. The interview form included questions about how the disease affects their lives and what they have changed their lives, their experiences with the treatment, and their thoughts about living with diabetes and about the future.

The patients, who met the study criteria, were informed about the study and their written and verbal approvals were taken. Individual interviews were held in each patient's own room. Before conducting the interview, the clinic staff was warned about the interview with the patient, and the measures were taken to ensure that the interview was not split. All interviews were recorded with the patient's permission.

Data analysis

The recorded interviews were transferred into text as the same. The raw data were read by two researchers, the topics that each of the patients most frequently pointed out were marked on the written text, and subcategories were formed by taking notes of the common and different words that the patients used. By combining the common aspects of the subcategories, 5 (five) main themes were identified. The evaluation of the results of the work was performed within the framework of these main themes.

Ethical considerations

The ethics committee approval was taken from the Ethics Committee of the Health Sciences University Gülhane Training and Research Hospital. The participants were also informed in written and verbal that the purpose, privacy and voluntary basis of the research and that they shall be able to end the interview whenever they want.

RESULTS

Seven of the patients participating in the study were males and 13 were females. It was determined that 45% of the patients were between 60-69 years of age, 85% were married, 60% lived with spouses and children. It was detected that the patients had diabetes for an average of 16, 55 years and 90% received insulin + oral anti-diabetic treatment (Table 1).

Table 1 Socio-demographic and clinical characteristics of participants (n=20)

Patient characteristics	N (%)
Gender	
Male	7 (35)
Female	13 (65)
Age	
40-49	2 (10)
50-59	7 (35)
60-69	9 (45)
70-79	2 (10)
Marital status	
Married	17
Bachelor	3
Lives with whom	
Single	1 (5)
Spouse	7 (35)
Spouse and children	12 (60)
Treatment type	
Insulin+Oral	18 (90)
Anti-diabetic	2 (10)
Oral Anti-diabetic	-
Diabetes year (mean)	16,55 (5-30)

As a result of the qualitative analysis of the patient interviews; the 5 (five) main themes were identified as “meeting with diabetes”, “difficulties in living with diabetes”, “fears caused by diabetes”, “coping with the diabetic life”, and “future with diabetes” (Table 2).

Table 2 Summary of the themes and subthemes

Main theme	Sub-themes				
	1	2	3	4	5
Meeting with Diabetes	First diagnosis	Their feelings as they learnt that they are diabetic	How they define diabetes	-	-
Difficulties in Living with Diabetes	Complying with diet	Transition to insulin	Social life challenges	-	-
Fears Caused by Diabetes	Regulating the glycemic index	Complication development	Genetic load	Fear of injection	-
Coping with Diabetic Life	Motivation	Family support	Self-control	Social life	Exercise
Future with diabetes	Complications	Being dependent	-	-	-

Theme 1: Meeting with diabetes

The first diagnosis

The patients stated that they incidentally learnt that they had diabetes, when they went to the doctor because of some complaints, such as cotton mouth, frequent urination, or after giving blood for routine control. The statements of three patients about this issue are as follows:

- My mouth and tongue were completely dry, I said I was going to die. Even the water of the tap was not enough, I was drinking so much water. My sugar was then at the level of 300 (Male, 69 years old).

- I was eating a lot. I urinated at night and drank lots of water. My blood sugar was measured, it was 140. This is the first time when I was hospitalized (Female, 41 years old).
- My daughter is a nurse. I was living with her, and as I went there I said I'd give blood. Then my daughter said to me, "You are a diabetic patient." (Male, 66 years old).
- I went to the doctor to have an analysis for a general check. Later, the doctor said, "Your sugar is too high." (Male, 58 years old).

Four patients stated that they did not feel like patient for a long time after the first diagnosis was made, they did not make any changes in their lives, and they explained that they were aware of their illnesses when the complications were seen:

- "At the beginning, I did not feel like I was sick, there was neither a pain nor a symptom. One day when I went to the doctor, I was shocked, when he said that I would begin to use insulin from then on, to my surprise my kidneys were going to get lost." (Female, 63 years old).
- "I did not care about it for approximately 15 years. There was nigrescence on my thumb, I fell loosely, I went to the hospital, guessed that it was from sugar. I started to do my foot care, I started to go to the hospital, I did not notice at the beginning, I did not care, but I was scared when the kidneys and eyes started to get lost" (male, 65 years old).

Their feelings when they learnt that they are diabetic

Some of the patients stated that when they learnt about their diabetes diagnosis, they did not have certain feelings and received it normally:

- When he said I am patient, I did not feel anything, I did not say tsk-tsk, my father was also a diabetic patient, therefore, I was expecting that (Male, 54 years old).
- I did not feel anything. I received it normally (female, 52 years old).
- Two patients explained their astonishment when they met with this disease:
- I did not know, hear about diabetes, therefore I got panic at the beginning. As the first work, I immediately gave up sugar (female, 73 years old).
- We are five siblings and all of them had diabetes, except for me. I got surprised when it was diagnosed on me. Because I paid attention to it. I said to myself that I shall learn how to live with it. (female, 63 years old).

One of the patients told that she remembered the experiences of a diabetic patient, who she knows and got frightened:

The legs of my acquaintance were cut off. I did not know what diabetes is until then. I immediately remembered that. God forbid, I got frightened thinking if the same would happen to me (Female, 64 years old).

Their definitions of diabetes

Almost half of the patients defined "diabetes" as a "bad" disease and told that it is hard to live with diabetes. Expressions of some patients on this issue are as follows:

- It ended my life, the life became very difficult with this disease. Eating and drinking ended. (Male, 45 years old)
- Diabetes did not seem to me very bad. I thought that it was an easy disease. But it did not have any differences from the cancer. It consumed out all my organs. (Male, 69 years old).
- As it does not have any symptoms and hazards, it felt as if I was not sick. At that time, I did not guess that diabetes was a bad thing. However, it damages all organs of your body, changes your life, decreases the life quality, requires continuous care. (Female, 61 years old).
- The end of this disease is bad. You lose your power every passing day. I cannot do that what I did last year. I affected all of my parts. (female, 73 years old).

Some of the patients stated that they saw diabetes as a friend, with whom they have to live together:

- I became friends with diabetes, you have to get used to this life, there is nothing else to do. (female, 52 years old).
- I was more frightened before, when I got used, my fear diminished. It became like a friend for me. You take your needle and medicine with you wherever you go. It is always with you, that is, it is like a friend. (female, 52 years old).

Theme 2: Difficulties of living with diabetes

Complying with diet

Almost all of the patients stated that the most challenging areas in their lives are eating and diet. One patient said as follows:

The challenging side is that you want something very much, but you can't eat, you want to eat dessert but you can't eat. If you eat, your sugar is up, if no, you want it more. I always want to eat, when we go out or to holiday, I do not pay attention to what I eat, I become freer (female, 71 years old).

Two of the female patients told that they do not have any supports from their spouses and children about eating as follows:

- For example; my husband eats butter, honey, everything at breakfast, when I see them, I can't keep myself. My husband eats desserts before me, I warned him a lot, he always does this. If he was patient, I would never eat near him (female, 58 years old).
- I do not cook rice dish to the meal, the children immediately say this does not without rice dish. And when I cook it, I eat it, too. If I do not cook, they do not like (female, 63 years old).

In addition, two patients stated that they feel discomfort when their children warn them about eating, this negatively affects their relationships with children:

- In fact, I told the children to warn me, if I eat much. And they say to me not to eat much or something. This time I think that they do not want me to eat, and I got sorry (female, 63 years old).
- I got very nervous, when someone at home tells me not to eat something or eat less. In fact, I know that they want to do me favour but I cannot do without getting nervous (female, 63 years old).

Passage to insulin

- Most of the patients using insulin indicated that they had difficulties in passage from oral anti-diabetics to insulin. The two patients' statements are as follows:
- Firstly, I did not want insulin and did not like to inject needle, preferred to use medicine. Injecting needle gives pain, but it is not problem. However, when you start to intake insulin, you cannot give it up, it causes addiction, I did not want this. Also, you will not become late with it, have to pay attention to its time. This is not easy (male, 66 years old).
- I got very frightened that insulin would hurt me. Medicine was always easier for me. I did not want it, my daughter injected it for a month, I could not do it myself. One day I was alone at home, I had to inject it myself. I could not inject it by fear, I got used (male, 45 years old).

Social life difficulties

Two patients stated that insulin use affected their social lives:

- I have to take it with me wherever I go, it is difficult to look for refrigerator everywhere I go, sometimes I forgot about it (female, 56 years old).
- It was not difficult to inject insulin, however, going to a corner and injecting insulin in the university attracted attention of everybody. They were looking as if there was something strange, and asking many questions. Insulin injection does not hurt anyway, but reactions of people bothered me (female, 41 years old).

Two patients explained that they could not go out because of the fear hypoglycaemia:

- I could not go out for a long time, I had vertigo, I sometimes lost balance, I was afraid of falling. It is something very difficult to experience, I get demoralized (female, 55 years old).
- I cannot go out alone. If my sugar is down and something happens to me, who will know that I am diabetic patient (female, 61 years old).

Theme 3: Fears caused by diabetes

It was determined that most of the patients had fears of diabetes although they are in different issues.

Arranging the glycaemic index

Some patients stated that they are worried about immediate decrease or increase of sugar. One patient told about it as in the following way:

It is something very difficult to live like this, it demoralizes you, you are always at an alert in respect to whether your sugar shall decrease or increase. And I do not know when it will happen, this makes me frightened (Male, 55 years old).

Complication development

Almost half of the patients stated that they are afraid of experiencing the complications of diabetes and of the addictions that this fear shall create:

- You lose from your eyes, arms, feet, I do not remember these, if I remember, I will lose my mind. Up to today, this has not happened, and I hope that it will not happen in the future (female, 52 years old).
- My biggest fear is to lose my kidneys and receive dialysis treatment. I now receive apheresis treatment, even this is difficult for me, I do not know how dialysis is, I am frightened. Something that will affect my life will affect my life, my family will get sorry for this and when they get sorry, this will reflect on me, I do not want this (female, 41 years old).
- Sometimes I am frightened, my mother's sibling lost his/her feet, because of that I am frightened. For now, I am free; I can go around, see around and do my works. If my foot is cut off, I will not be able to do anything (male, 65 years old).

Genetic load

Some of the patients told that they are afraid that diabetes will pass on to their children. The statements of two patients are as follows:

- One of my fears is that my child will have diabetes, too. I have read much; the child of every diabetic patients does not come to the world as a diabetic patient. Our distant relative has diabetes, he/she did not pay attention and now is in a bad situation. As long as I see him, I say that I have to be more attentive, I have to be a good and healthy mother for my children (male, 61 years old).
- This passed on to me from my mother, I am very afraid that it will pass on to my daughter. They know what they have to do. They will say "I will pay attention" as it comes from the family, but I did not say so. Probably, they will not pay attention when they are young (male, 58 years old).

Fear of injection

Two patients stated that they are afraid of applying insulin injection:

I am still very afraid of using insulin. I can do apply it on to my leg. It is difficult for me to inject myself (female, 64 years old)

Theme 4: Coping with the diabetic life

Motivation

More than half of the patients stated that they had trainings about diabetes. However, they explained that they problems about applying what they know and about motivation. One patient explained this as in the following way:

In fact, I measure sugar on my own, I see that it is high, however I do not mind it thinking that it is incorrect. Just like turkeys voting for the Christmas. I know that this is wrong, I am afraid of having another problem. I say that let me die as in this way. I do not have any power, I got old already (female, 64 years old).

Family support

Two female patients stated that the care burdens of their husbands, whom they have to look after, force them:

My husband's disease tired my very much. My husband is Alzheimer patient. I do everything, he depends on me. I cannot go to regular controls, I cannot leave him" (female, 64 years old).

My husband is paralyzed, I look after him. God forgive me, I got nervous when I saw my husband lately. I came here and got relaxed a little bit in the hospital (female, 63 years old).

Self-control

The patients stated that they can cope with this disease, only if they undertake responsibilities about their diseases. The expressions of two patients are as follows:

Firstly, I said that it would have treatment, however I knew that it did not have any treatment. You have to do its treatment on your own. You will control yourself, will not eat, take your medicines (female, 64 years old).

Diabetes is not a bad disease, if you look after yourself regularly, there are not any problems. You will become the doctor of yourself (female, 61 years old).

Social life

Most of the patients said that they did not get apart from the social life in order to cope with their diseases:

You can never forget that you are patient. When I am alone, I always think what this disease will do to me. However, I go to the neighbour, to my friend, go out and have a look-around, I get rid of my problems (female, 56 years old).

There are soap operas that I watch. They make me feel relaxed. Following it, thinking about what will happen next, waiting for the next week keeps me alive and relaxed (female, 58 years old).

Exercise

Only one patient explained that she started walking after diabetes and walking made her relaxed:

I go to walking, I get relaxed, walk with my friends, it is also good for my sugar (female, 55 years old).

Theme 5: Future with diabetes

Complications

Some of the patients said that they had some anxieties about the future, when the symptoms of the complications of the disease begin to appear. One patient said the following:

Its treatment is very important, it saves life. If you pay attention to your diet, you live like normal people, you do not have any differences. I do not know what will happen in the future, but I am afraid that something will happen on some parts of me. Thank God, I have nothing for now (male, 56 years old).

Being dependant

The expressions of the patients, who are worried about not being able to satisfy the health requirements on his/her own and adopts a fatalistic approach, are as follows:

- My morale is ok, I do not occupy myself with this problem. There is no rescue, our end is certain, we will die one day. I hope that God shall not make me dependant on anyone. I want to be happy, when I am in good health (male, 61 years old).
- There is nothing to think about the future. I will go on the same life. I will get treatment at home if necessary or in the hospital if necessary. I do not think pessimistically. I hope that I will be good (female, 52 years old).

DISCUSSION

The aim of this study is to reveal the feelings, thoughts and experiences that the diabetic patients experience in their disease process, to determine what the disease means for them and to reveal ways to cope.

In our study, while it was seen that the majority of the patients met with diabetes when they applied to the doctor because of its symptoms; some reported that they had learned by chance when they gave blood during general checks; and when they were diagnosed with diabetes, they first expressed their amazement, experienced panic and fear. In addition, it has been seen that those, who have diabetic patients in their family recognize the indications in their own family, and that they actually expect such recognition, and that this recognition is normal. In parallel to our study, Berenguera and colleagues conducted a qualitative study of patients with diabetes; in this study, it was stated that when the patients meet with diabetes, they experienced fear, anxiety, confusion and sadness towards the future, and that diabetes was caused because of genetic predisposition, thought that diabetes is an inevitable consequence for them [5].

The diabetes experience is different for each patient. The patient's interpretation of his/her disease, his/her perception, how he/she defines the disease, his personal experiences and beliefs as an individual influence his/her perception of the disease. There have been studies, which have shown that disease perception in diabetic patients is related to coping, treatment compliance, and quality of life [6-8]. In our study, patients defined diabetes as a difficult and bad disease. In their statements, it was observed that the patients paid less attention to diabetes, since it maintains silently at the beginning, however in the ongoing periods with revelation of the complications, they started to recognize its seriousness, and their acceptance and compliance efforts increased. It can be said that patients, who stated that they regarded diabetes as a friend in our study, are a sign of the above-mentioned acceptance behavior. In the study of Mendenhall and colleagues, it has been reported that patients were initially foreign to diabetes, and in time diabetes became a part of the patient's life [8].

It has been shown that one of the areas, in which the diabetic patients had the hardest challenge in their lives with diabetes, is complying with the diet and changing eating habits [9]. Berenguera, et al. [5] pointed out in their study that the most important change for the diabetic patients is that they cannot eat certain prohibited foods, and that they have a stronger desire after diabetes for those foods, which they may never wanted in the past. In our study, parallel to this, the patients stated that after receiving the diagnosis of diabetes, and they had difficulties in being obliged to go on a diet and limit their eating.

In our study, it was determined that the patients sometimes had a discussion with their spouses or children about paying attention to the diet and that they did not receive sufficient support. In Demirtaş and Akbayrak's studies with the diabetic patients on the acceptance of disease, it was seen that the patients, who were in a period of rebellion and anger, had great furiousness and anger about the warnings of their relatives about their compliance with the diet [10]. The chronic diseases are having a quality of crisis that must be overcome for each family member. Especially in the case of a disease requiring a compulsory lifestyle change such as diabetes, the family members are concerned about the rules that the patient does not obey in relation to his/her disease and fear that the management of the disease will disappear, therefore, it was shown in the literature that the family cannot be handled independently [11,12].

In the studies, the patients stated that they felt was more or less "diabetic" depending on the type of treatment administered to them, that they linked insulin treatment to more severe diabetes and that it was a difficult step to start the insulin treatment [5,9]. Parallel to this, in our study, it was also found that patients perceive the transition to insulin treatment as deterioration of their disease. It should be considered by the health professionals that the patients may perceive transition to insulin as a personal failure, and it is important for patients to try to discover their concerns and beliefs about insulin treatment.

In our study, the patients stated that they were afraid of suffering when injecting insulin especially in the beginning of the insulin treatment, and they gradually became accustomed to this pain, however, they could not use to being exposed to curious glances of others and therefore they preferred not to participate in social environments. Injecting insulin may lead the patients to experience a social stigma [13]. In the study of Çelik, et al., it was determined that the patients could not make insulin injections in the workplace because of fear of losing their jobs, and some patients also concealed insulin usage because they were worried that their friends might see themselves as poor when they were making insulin [14].

In our study, the patients stated that they were afraid of experiencing hypoglycaemia attack, being exposed to the complications of diabetes, the addiction that could develop depending on this, and inheriting the disease to their children. Especially not knowing when they will have a hypoglycaemia attack causes worry in patients. With this concern, the patients may limit their daily lives, prefer not to go out of the house, and as a result, may experience social isolation. There are studies, in which the patients describe life with hypoglycaemia as experiences that limit the social life, cause physical injury or trauma because of possible accidents, and complicate the business life [15,16].

Vascular and neuropathic complications may develop as a result of diabetes. The most important cause of morbidity and mortality in the diabetic patients are chronic complications. Changes due to diabetes can affect many systems in the body, making the life of the patient and his/her family difficult. In our study, it was seen that patients were worried more about complications than loss of limbs, organs, dependency, and difficulties for themselves and their families in their lives, which, they think, will be caused by the complications. In the study performed by Olsen et al., it is reported that there is a strong link between the level of anxiety and the fear of complications experienced by the diabetic patients [17].

The presence of a diabetic patient in the patients' families may be a factor that allows him/her to see what he/she will encounter in the coming periods and may make the acceptance of the disease faster. However, having a badly managed diabetic patient in the family may lead to fear, anxiety and sadness in the patients [18]. In our study, it was also seen that the negative experiences in the family related to diabetes increased their fear.

Another case that the genetic predisposition feature of diabetes caused to patients as determined in our study is that the patients are also afraid that their children will also be diagnosed with diabetes in the future. It should be emphasized in patient interviews that the environmental factors such as exercise and nutritional habits are important in the formation and progress of diabetes as well as the genetic factor of the disease is important, stress resulting from the fact that the patients feel themselves responsible should be reduced, and the direct or indirect influence on the metabolic control should be prevented [19].

In our study, it was determined that more than half of the patients received training about diabetes, but the patients had problems in application and motivation. Although the patients are trained about diabetes, changing behaviour is a challenging experience for the diabetic individual. Self-management in diabetes depends not only on the technical skills necessary to perform the treatment behaviours, but also on the individual's level of motivation. It is important to have a good psychosocial adjustment to achieve this motivation [20,21]. For example; the compelling effect of the care burden created by the fact that two female patients have to look after their patient spouses, as two women explained in our study, causes the patients' motivations to fall and not pay enough attention to their own treatment. It is difficult to expect that the patient, who says "When I am angry at my husband, I eat and my sugar rises and they barely take me to the hospital", will have a balanced glycaemic index unless the stress of the patient spouse's care burden and the anger to her spouse diminish. In these situations, strengthening the patient's coping skills and regulating the glycaemic index with well-planned motivational interviews is a prerequisite.

In our study, it was determined that only one of the patients started walking after diabetes and walking made her relaxed and she used to walk a coping instrument. Apart from that, no patient mentioned exercise, which is an important component of diabetes treatment. It was determined that in the patients with type 2 diabetes, exercise has arranged glycaemic control, arranged insulin sensitivity, and reduces hyperglycaemia of hunger and absence [22]. In Kaymaz and Akdemir's study, it was determined that 28.7% of patients exercised regularly [23]. In our study, too, although exercise was an important issue with the diet mentioned in the training that the majority of the patients stated to have, it was concluded that they did not internalize and do the exercise.

In our study, it was found out that the most important prospects of the patients with the future in the life with diabetes were to use their medicines and not to encounter complications, and it was determined that they generally adopted a fatalistic approach. It was determined in the studies carried out that most of the diabetic patients experience future anxiety and are afraid of the presence of long-term complications [5,24].

CONCLUSION

During this study, findings about the effects of diabetes on the daily lives of the patients such as what the diabetic patients experience during their lives with diabetes, what their emotional reactions are and how they cope with this

situation. It was seen that the patients have vast knowledge of diabetes, but most of them experienced difficulties in implementation and had difficulties in diabetes management. For this reason, it is thought that it is important not to consider diabetes as only a physical disease, in addition, the subjects such as emotional reactions, perception of the disease, and life challenges should be evaluated by the health professionals in order to improve diabetes compliance.

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