



# Family Experience in Care of Patientsdiabetes Mellitus Type 2: Phenomological Study

Mastiur Napitupulu<sup>(✉)</sup>, Natar Fitri Napitupulu, Suryani Sagala, Asnil Adli Simamora, and Olivia Feby Mon Harahap

University of Aufa Royhan, Padangsidimpuan, Indonesia  
mastiurn@gmail.com

**Abstract.** The function of the family to care for family members with health problems is that the family is able to provide a sense of security, comfort in the environment needed for patient healing. The purpose of the study was to determine the family's experience in treating patients with type 2 diabetes mellitus. The research method was a qualitative type with a phenomenological study design. The participants were 5 people with the sample technique using Snowball Sampling. The data collection method used in-depth interviews and analyzed using the Coal-laizi Method. The results of the study: 1) The family said the symptoms of diabetes were frequent urination; 2) Families take time to help self-care patients; 3) Family efforts in healing; 4) Feelings of family anxiety in caring for; 5) Utilize health facilities in blood sugar control. The conclusion is that the relationship between family support and patients, the relationship of family knowledge about type 2 diabetes mellitus, peer relationships in the patient's family, greatly affect patients with type 2 diabetes mellitus in obtaining health such as encouragement to take care of patients. The conclusion of the study can be used as additional insight for families who care for type 2 diabetes patients.

**Keywords:** Family Care · Type 2 Diabetes Mellitus Patient · Phenomological Study

## 1 Introduction

Diabetes mellitus is a group of metabolic diseases characterized by increased blood sugar levels due to impaired insulin secretion, insulin action or both.<sup>1</sup> Based on the International Diabetes Federation (IDF) data, the global prevalence rate of people with diabetes mellitus in 2012 was 8.4% of the world's population and increased to 382 cases in 2013. IDF estimates that in 2035 the number of incidents will increase to 55% (592 million) and Indonesia is the 7th country with the highest incidence of 8.5 million sufferers.

According to the International Diabetes Federation (IDF) people living with diabetes in 2013 were estimated at around 382 million people and the number will continue to increase to 592 million people by 2035 worldwide. IDF data from 2015 also showed that more than 80% of deaths from diabetes occurred in low- and middle-income countries<sup>2</sup>

and in 2019 the IDF stated that 463 million adults aged 20–79 years were living with diabetes in 2019 a figure which is expected to increase to 578 million in 2030 and 700 million in 2045. The global prevalence of diabetes mellitus in adults over the age of 18 has increased from 4.7% in 1980 to 8.5% in 2014. 5 biggest in the world<sup>3</sup>. Meanwhile, according to the 2012 JATIM Health Profile on mortality (mortality) explained that most of the deaths occurred at home. The high number of cases of diabetes mellitus that occurs proves that some patients who experience diabetes mellitus do not have sufficient knowledge, behavioural skills so that their attitudes and behaviour to manage the disease do not run optimally. A person affected by diabetes mellitus cannot recover completely, but it can be controlled so that blood sugar levels do not increase or decrease drastically. One of the diabetes mellitus control programs in Indonesia is the implementation of risk factor control to reduce morbidity, disability and death caused by diabetes mellitus.

The report from the Health Research and Development Agency of the Ministry of Health with the results of basic health research<sup>4</sup> states that the prevalence increase in Indonesia in people with Diabetes Mellitus obtained based on interviews, which was 1.1% in 2007 to 1.5% in 2013, while the prevalence based on doctor's diagnosis was highest in Central Sulawesi (3.7%) and the lowest in West Java (0.5%), while in North Sulawesi it reached 2.4%. Then in 2018, according to RISKESDAS data, there was an increase in prevalence in people with Diabetes Mellitus in 2013, 6.9% to 8.5% in 2018.<sup>5</sup> Data obtained from the 2012 Integrated Disease Surveillance (STP) data report shows the highest number of cases other than ARI and diarrhea is a disease of diabetes mellitus with a total of 3,717 cases of outpatients being treated at district/city hospitals and health centres.

For outpatient diabetes, 2,918 patients were treated in 123 hospitals and 809 patients were treated in 487 health centers in 28 districts/cities throughout North Sumatra. Meanwhile, in 2013 there were 3,948 patients who were hospitalized. Based on these data, it can be seen that the number of people with diabetes mellitus in North Sumatra is still very high. Based on the explanation of the background above, the researcher conducted a preliminary study to 4 family members with type 2 diabetes mellitus at the Batunadua Public Health Center, Padangsidempuan City, it was found that family members did not play a family role in controlling diabetes, which was to help balance blood sugar levels. The balance of sugar levels in the blood can be done by implementing four main pillars, namely meal planning, physical exercise, hypoglycemic efficacious drugs and education. Therefore, it is necessary to know the extent to which the family's ability to seek diabetic care at home in carrying out the pillars of diabetes mellitus management is necessary. Based on the results of the preliminary study above, the author is interested in researching "Family Experiences in Caring for Patients with Type 2 Diabetes Mellitus in a Phenomenological Study at Batunadua Health Center in Padangsidempuan City".

## 2 Method

This type of qualitative research with a descriptive type of phenomenology approach. Qualitative method is a research that intends to understand the phenomenon of what is experienced by the research subject, for example behavior, perception, motivation, action, etc. holistically and by means of description in the form of words and language, in a special natural context. And by utilizing various natural methods<sup>6</sup>.

The data collection technique used an interview technique by giving several questions answered by the participants, the answers that the researchers got by digging up information through the questions given, then the researchers made a transcript based on the answers given by the participants, then the researchers did a mapping based on the answers of the same participants. so that it will form a theme and sub-theme to be included in the research. Participants were as many as 5 people who came from different backgrounds so as to bring up information from different experiences. Another research instrument used was a recorder or voice recorder which was used to record the conversations of participants and researchers in the interview session.

### 3 Result

Interviews were conducted with 5 participants in the working area of Batunadua Health Center Padangsidempuan. Participants are family members who have and are currently caring for family members affected by type 2 diabetes mellitus and have signed an agreement to become research participants before the interview began.

The themes determined from the results of the interviews were as many as 5 themes that described various experiences given by families to family members affected by type 2 diabetes mellitus. The themes were 1) Families said that the symptom of diabetes was frequent urination. 2) The family takes the time to help the patient's self-care. 3) The family effort in healing the patient. 4) Feelings of anxiety in the family caring for the patient. 5) Utilize health facilities in checking blood sugar.

### 4 Discussion

1. Family Says Diabetes Symptoms Are Frequent Urination. Based on the results of interviews conducted with the five participants, it was found that the family said the symptoms of diabetes were frequent urination which consisted of the following sub-themes:

- a. Frequent urination at night. From the results of interviews with 5 participants stated that family members affected by diabetes mellitus tend to urinate frequently at night. According to<sup>7</sup>Diabetes is a metabolic disease characterized by an increase in a person's blood sugar (glucose) levels in the body that exceeds normal limits (hyperglycemia). High blood sugar levels are excreted through urine (urine), so that urine contains sugar or sweet so it is called diabetes. Diabetics who often wake up at night will generally feel weak and easily sleepy during the day because their sleep cycle is disrupted due to frequent awakenings to urinate.

2. Families take time to help with patient self-care. Based on the results of interviews conducted with the five participants, it was found that the family took the time to help the patient's self-care consisting of the following sub-themes:

- a. Give therapy to be more relaxed. Based on the results of the interview, it was found that three participants used reflexology therapy and self-care. Reflexology performed

on the palms of the hands and feet, especially in problem areas of the organ, will provide stimulation to the nerve points associated with the pancreas, these nerve points stimulate the pancreas to produce insulin.

b. Families spend time in administering drugs. Based on the results of interviews, 2 participants took the time to give drugs to patients as a way to prevent blood sugar levels from rising. This is in line with research<sup>9</sup> which states that one of the factors that influence the success of treatment in patients is family support.

3. Family Efforts in Healing Patients. Based on the results of the interview, it was found that the participants' efforts in healing patients consisted of the following sub-themes:

a. Bringing to health services. Based on the results of interviews, it was found that 4 participants tried to bring diabetes patients to health services for treatment. This is in accordance with research<sup>10</sup> that one of the factors that influence family health is the role of the family which can influence in determining individual health beliefs and values because the family is the supporter and decision maker regarding the care of sick family members. According to<sup>11</sup> one of the functions of the family in general is the function of health care/maintenance to maintain the health condition of family members in order to maintain high productivity.

4. Feelings of family anxiety in caring for patients. Based on the results of interviews obtained complaints from 5 participants in helping the patient's mobility which consists of the following sub-themes:

a. Family anxiety in taking care of the patient. Based on the results of interviews, 2 participants often complain of worry and anxiety when caring for and helping self-care for patients with type 2 diabetes mellitus<sup>12</sup> Anxiety arises from confusion, confusion and fear of the unknown and the state of confusion are rooted and growing anxiety, anxiety and sadness are the two main psychological causes of stress. One of the psychological responses is anxiety. Families who care for patients with chronic disease, 40% usually experience anxiety with signs of feeling tense/uncomfortable, feeling afraid that something bad will happen, feeling uncomfortable, nauseated, shortness of breath, and restlessness.

5. Utilizing Health Facilities In Checking Blood Sugar. Based on the results of interviews with 5 participants, it was found that to check blood sugar levels using health facilities, which consisted of the following sub-themes:

a. The family brings the patient's blood sugar check to the health service. Based on the results of interviews, it was found that 3 participants stated that they used health services in checking blood sugar levels, where participants said that when controlling patients' blood sugar levels, going to health services had a good effect for patients. This is in line with research conducted by<sup>11</sup> that out of 36 patients who had their blood sugar levels checked, regularly can prevent patients from experiencing complications, both macrovascular and microvascular.

## 5 Conclusion

Family experience in caring for patients with type 2 diabetes mellitus, 1) The family said the symptoms of diabetes were frequent urination; 2) Families take time to help self-care patients; 3) Family efforts in healing patients; 4) Feelings of family anxiety in caring for patients; 5) Utilize health facilities in checking blood sugar. Where the family is the first aid and aid for patients suffering from diabetes mellitus, they must better understand and know what are the signs, symptoms, causes and factors of type 2 diabetes mellitus and must always be alert in treating patients with type 2 diabetes mellitus.

**Acknowledgments.** This research can be used as an additional insight for families who care for diabetes patients at home so that families can further improve their skills in treating type 2 diabetes mellitus patients and this can also be applied by health workers to provide education on the management of type 2 diabetes mellitus to families who have type 2 diabetes mellitus. Family members with health problems of type diabetes mellitus. For further researchers, it is recommended to develop research related to deeper excavations through the Picture of Family Coping in Caring for patients with type 2 diabetes mellitus.

**Authors' Contributions.** The title "AUTHORS' CONTRIBUTIONS" should be in all caps.

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