Family Behavior in Caring Patients with Diabetic Foot at Home

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ABSTRACT

Diabetic ulcers are one of the chronic complications of diabetes mellitus. Families are important partners in providing complex health services such as during the treatment of diabetic foot ulcer patients. This study is a qualitative study that aims to explore the meaning of family experiences in caring for diabetic foot ulcer patients at home in Delitua Village. This study uses a phenomenological qualitative method with interviews with families who have experience caring for diabetic foot ulcer patients for more than one year at home. The sampling technique used purposive sampling with ten participants. This research was conducted from December 2020 to February 2021. Data analysis used the Colaizzi method. The results of the study found the themes of family experience in treating diabetic foot ulcer patients, namely (1) emotional experience in treating diabetic foot ulcer patients (2) hard efforts to treat diabetic foot ulcer patients (3) Getting support from family in treating diabetic foot ulcer patients. (4) Experiencing limitations in treating diabetic foot ulcer patients (5) Family expectations in treating diabetic foot ulcer patients. Based on the results of the study, it was found that the family could not provide good care in treating diabetic foot ulcer patients at home.

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INTRODUCTION

Diabetic foot ulcers are currently a major health problem worldwide, due to the increasing number of cases, chronic ulcers and difficult to heal, experiencing infection and leg ischemia with the risk of amputation and even life-threatening, requiring large health resources, thus giving a socio-burden –economics for the patient, society, and the country. Various treatment methods have been developed but until now they have not yielded satisfactory results. Diabetic ulcers will be experienced by diabetics around the world every year around 9.1 million to 26.1 million. Where the proportion of diabetics with a history of diabetic ulcers is higher than the proportion of diabetics with active ulcers, namely 3.1 to 11.8% or 12.9 million to 49 million worldwide (IDF, 2017). Meanwhile, according to Sulistyowati (2015) explains that, for the prevalence in Indonesia, patients with diabetic foot ulcers are around 15% with a risk amputation 30%, mortality rate 32%, and in Indonesia diabetic foot ulcers is the biggest cause for hospital treatment by 80%. Alertness to diabetes foot health problems at Indonesia is also still lacking. Diabetic foot service facilities still limited and a lack of trained health personnel on foot services diabetic causes foot care in diabetic patients in Indonesia still not getting enough attention (PERKENI, 2011).

Different phenomena of family experiences in caring for patients with chronic diseases vary widely. Beandlands et al. (2015) reported that family experiences in caring for family members with chronic diseases have physical, emotional, social and economic impacts. The physical impact is in the form of fatigue, muscle pain, insomnia and hypertension, the impact on emotions in the form of anger, annoyance, worry and depression, the social impact in the form of disruption of activities with other family members and interaction with the surrounding environment, the impact on the economy in the form of increased family expenses for maintenance costs. Chung at all (2018) in his research on the experience of families caring for elderly people with chronic diseases in Taiwan found physical, psychological and social relations problems with the environment.

Seeing various phenomena related to the role of families in caring for patients with diabetic foot ulcers at home, researchers are interested in exploring more deeply how families experience caring for patients with diabetic foot ulcers at home. This research will be conducted with qualitative research with a phenomenological approach because there are still very few studies related to family experiences in caring for patients with diabetic foot ulcers at home which are carried out with a qualitative design. In addition, by using a phenomenological approach, more comprehensive and in-depth new information will be obtained related to the phenomenon of the family as a caregiver in caring for patients with diabetic foot ulcers at home, which may not necessarily be obtained through other research designs.

METHOD

Research Participants

Participants in this study were families who cared for patients with diabetic foot ulcers at home in Deli Tua. The number of participants during the data collection process was 10 families of patients with diabetic foot ulcers. The selection of participants was carried out by means of purposive sampling, which was carried out by selecting useful participants according to the research objectives (Polit & Beck, 2012), and fulfilling the inclusion criteria, namely (1) Willing to share their experiences, (2) Intensively caring for family members with diabetic ulcers (3) Families aged> 17 years and the exclusion criteria in this study were: (1) Families caring for patients with deaf diabetic foot ulcers, (2) unable to communicate. According to Polit and Beck (2012), phenomenological studies tend to use a small number of participants, usually only 10 people or less. In this study, the number of participants involved depends on the criteria and willingness of the participants, if the interview or data collection has reached saturation, data collection will be stopped.

Research procedure

The study was conducted between January and February 2021 in Deli Tua, Indonesia. The data collection process was carried out by in-depth interviews with families caring for diabetic foot ulcer patients at home who were willing to become respondents to fill out the consent form to become a respondent. After that, the researcher went to the client’s house to conduct in-depth interviews recorded. Interviews were conducted with using open-ended questions that facilitate responses to questions related to family experiences in caring at home. The validity of this study was achieved in two ways that is using field notes when the interview is conducted and ask other researchers to reread all of the existing transcripts and match existing themes extracted from transcripts that have been made by researchers.

Instrument

In qualitative research the main instrument is the researcher himself, the researcher role as an instrument in the research conducted. Researchers use tool to help with data collection to help research, namely by making yourself the researcher himself as a research instrument equipped with a recording device, interviews using a voice recorder in the form of a cellphone.

Data analysis

Data derived from information during interviews recorded using a tape-recorder and made a transcript verbatim. After that the data were analyzed using Colaizzi method.

RESULTS AND DISCUSSION

Based on Table 1, there is no difference in the proportion between the ages of 20–40 years and the ages of 50–60 years, most mothers are high school graduates (60%), and the majority are Muslim (70%). In addition, the proportion of
ethnicity among Javanese has a higher proportion, namely 50% compared to Karo ethnicity (30%) and Simalungun (20%) while the majority of mothers work as housewives, namely (70%). The results identified five themes related to family experiences in caring for patients with diabetic foot ulcers at home, including: namely (1) Experiencing emotional in caring diabetic foot ulcer patients (2) striving care diabetic foot ulcer patients (3) Getting support from family in caring diabetic foot ulcer patients. (4) Experiencing limitations in treating diabetic foot ulcer patients (5) Family expectations in caring diabetic foot ulcer patients. Based on the research results, it is hoped that the family can provide good care in caring diabetic foot ulcer patients at home.

Table 1.
Characteristic of participant in this study (n = 10)

| Characteristic | Absolute frequency (n) | Relative frequency (%) |
|---------------|------------------------|------------------------|
| Age           |                        |                        |
| 20 – 40       | 5                      | 50                     |
| 50 – 60       | 5                      | 50                     |
| Graduated     |                        |                        |
| Junior high school | 4                   | 40                     |
| Senior high school | 6                   | 60                     |
| Religion      |                        |                        |
| Moslem        | 7                      | 70                     |
| Christian     | 5                      | 50                     |
| Ethnic        |                        |                        |
| Karonese      | 3                      | 30                     |
| Javanese      | 5                      | 50                     |
| Simalungunese | 2                      | 20                     |
| Occupational  |                        |                        |
| Housewife     | 7                      | 20                     |
| Civil servant | 1                      | 10                     |
| Farmer        | 1                      | 10                     |
| Entrepreneur  | 1                      | 10                     |

Having An Emotional Experience

Experiencing emotional care for patients with diabetic foot ulcers. During the interview, eight out of ten participants experienced emotional distress in caring for diabetic foot ulcer patients, namely experiencing positive emotional pressure and negative emotional pressure.

"... caring for parents is the duty of a child, deck... because from childhood until we grow up, parents take care of us"(P.1)

"... he likes it as a child, I can still take care of my parents, be devoted to the deck because the term returns the favor like how he used to take care of me..."(P.9)

"... if we take care of the mother, we have to be patient because the old man whose name is old, so what they want to do is done, the point is to be patient (smiling)..."(P.1)

"... if you are asked about your feelings, you will definitely be sad, especially if this is my only mother, father is not there anymore, I am the only woman, my brother has already left and has a family, so I myself take care of my mother..."(P.2)

"... his grief, yes, if you recur his hypertension is sad, see it because he likes dizziness, sometimes he can't wake up, if it's so sad I see him sometimes..."(P.9)

"... worried because I was taken to the hospital when it was so bad..."(P.7)

Striving Care Diabetic Foot Ulcer Patients

Eight out of ten participants prefer to bring families suffering from diabetic foot ulcers to traditional medicine, hospitals and clinics to get health services. This is in accordance with the participant's statement as below:

"... yes, if you have a relapse, you often go to the health center every day (laughing)..."(P.1)

"... the experience was good, but in the past, my mother's parents were very bad and they were taken to the hospital and were unconscious..."(P.8)

"... especially at midnight yesterday, I have found the last rickshaw, luckily yesterday it was 11 o'clock there was a rickshaw, mom, I ran my mother to the nearest clinic..."(P.2)

"... The village medicine that is given is like oil applied to the injured leg and the body is all given paren..."(P.4)

"... the medicine given to us and the healer is a drink boiled with many kinds of citrus and plants which are taken every day..."(P.4)

"... no, at least I was drinking cucumber and watermelon juice..."(P.6)

Get Family Support in Caring for Diabetic Foot Ulcer Patients.

From the results of the interviews conducted with the ten participants, it was found that the family received family support while caring for patients with diabetic foot ulcers at home, namely getting care assistance from the family and getting material support.

"... all parties in the family, wives, grandchildren and relatives who are far away always call, because that is what parents need"(P.1)

"... yes all of us, especially my father, my husband, my children and siblings too..."(P.9)

"... just give me the spirit, don't focus on the disease, the fear will come as a stroke anyway, if you think about it, the tension will increase..."(P.6)

"... yes, I will definitely give you support, whether it's when you are healthy or when you have a relapse, yes, of course the support can make you feel happy and happy..."(P.7)

"... the support is all material, spiritual, religious, and food is also arranged at home, what can be eaten or not, what can not be eaten, we don't give it, the name of the parents wants us to give it once a month..."(P.1)

"... oh, that's right, mom's way of managing her diet, right, like reducing the fatty stuff, practicing that is the deck, sometimes it's hard to control it because what I cook is what my mother eats, sometimes I myself am the one out there eating my mother's taboo food, so that my mother does not eat it too, like that..."(P.2)

"... the church is diligent in its support so that it gets better soon..."(P.3)

Experiencing Limitations in Treating Diabetic Foot Ulcer Patients

When treating diabetic foot ulcer patients at home, the family experiences obstacles in carrying out daily activities, namely difficulties in carrying out wound care, adjusting diet, difficulty in prescribing medication, difficulties in facilities and difficulty managing parents.

"... the difficulty is bro, it's hard to treat the wound because sometimes the wound is confused about whether it's good or not so I don't know what medicine to continue..."(P.1)

"... I sometimes memorize the process of changing the bandage and washing the wound but I'm afraid what I did wrong was wrong, so I also did it carefully and slowly even though I was afraid that it was actually wrong..."(P.5)

"... yes it's also difficult, he is a hard person to work with in treating his wound, sometimes he says that you don't have..."
to be treated anymore, so that’s it. Sometimes if you say it like that we are confused about treating his wound but we are still forced even though he is rejected by him " (P.8)

**Family Expectations in Caring Diabetic Foot Ulcer Patients.**

Expectations from the family Eight out of ten participants said that the family hopes to be given a cure and stop smoking in hypertensive patients. The following is the participant’s statement: "... the hope is the deck, the doctor said that it has been a long time since the doctor for hypertension is 1 year and 6 months. What can be said is how bad it is, if it is a miracle, it is your hope that you will recover your mother .." (P.2)

"... The hope is that your parents will get well soon, continue the strokes, hopefully they never recur and eat more easily manageable, that’s the best .." (P.8)

" ... I only hope that I want my mother to get well soon because I realize that health is expensive ... ",(P.9)

**DISCUSSION**

This study focuses on family behavior in caring for patients with diabetic foot ulcers. Participants were selected according to the research inclusion criteria and came from the village of Deli Tua. Based on the results of this study, the researcher identified 5 themes. The five themes are: (1) Experiencing emotions in caring for diabetic foot ulcer patients (2) seeking treatment for diabetic foot ulcer patients (3) Getting family support in caring for diabetic foot ulcer patients. (4) Experiencing limitations in treating diabetic foot ulcer patients (5) Family expectations in caring for diabetic foot ulcer patients. Based on the results of the study, it is hoped that the family can provide good care in caring for diabetic foot ulcer patients at home. Emotional experiences include the family’s first response in caring for a patient with diabetic foot ulcers. These are often negative and distressing after the diagnosis, displays disappointment, bad hopes, the need for time to accept the condition, confusion, anger and lack of understanding. This is in line with research conducted by Inzucchi et al., Who reported that the family underwent overcoming changes from difficulties in accepting situations, bad desire to see their family, anger and feelings of sadness. Furthermore, the current study shows positive emotional experiences of some participants, based on absence burden and gratitude for strength. This finding is confusing and contradicts research by Andreyko reported the first emotional response to rejection. Usually, people who are facing problems tend to be sad and angry, even though showing positive emotions is beneficial for a higher propensity to attain a certain achievement. Therefore, this observation needs to be studied further. The acceptance process involves dealing with unforeseen circumstances, which often begin with rejection or rejection. This does not happen quickly, because time is very important, followed by the possibility of acceptance by the mother, with sincerity and patience in dealing with daily life of a family with diabetic foot ulcers at home. In addition, affected families place their environment in an important position in the family in order to foster the development of a warm emotional relationship that involves giving attention and affection. Having a family with diabetic foot ulcers requires a lot of money, especially in the wound care process. These demands include treatment, both medically and Traditional and alternative therapy, because the condition presents various kinds of problems, especially health problems. The immune system also tends to be very bad against disease, then routine health checks are needed. Meanwhile, meeting the needs of daily activities involves teaches basic habits, including eating, bathing and dressing, which is often done by mothers. In this study, sick children were taken to alternative medicine to treat wounds, and they were also move like other people. When a family is entrusted with nurturing a patient with diabetic foot ulcers, various obstacles will arise. Besides, it cares for a family with diabetic foot ulcers will give good enthusiasm for diabetic foot ulcer patients to heal and follow a good treatment program.

**Limitation of The Study**

Limitations in this study include the subjectivity of the researcher. This research is very dependent on the researcher's interpretation of the meaning implied in the interview so that the tendency for bias still exists. To reduce bias, a triangulation process is carried out, namely source and method triangulation. Triangulation of sources is done by cross-checking the data with facts from different informants and from other research results. While the triangulation method is done by using several methods in data collection, namely in-depth interviews and observation methods.

**CONCLUSIONS AND RECOMMENDATION**

Family is the one who plays a very important role in caring for a family with diabetic foot ulcers. Therefore, exploration of family experiences is expected to provide better understanding of family and health conditions workers, who are needed in providing proper care and maintenance handling.

**Conflict of Interest Statement**

The authors state there was no conflict to disclose.

**Ethical Consideration**

This study was approved by the Health Research Ethics Commission, Faculty of Nursing, Universitas Sumatera Utara, No. 126/KEP/USU/2021, and the consent of respondents was obtained via an informed consent form.

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