

# A Phenomenological Study: Self-management Experience of Type 2 Diabetes Mellitus Patients in Manggarai Regency, NTT

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**Keywords:** Phenomenological Study, Diabetes Mellitus Patients' Experience, Self-management.

**Abstract:** Individu with diabetes mellitus had different experience in diabetes mellitus management care. The main goal of diabetes self- management is to normalize insulin activity and blood glucose level to reduce the development of vascular and neuropathic complication. The objective of this study was to describe diabetes mellitus patient's experience on self-management in Manggarai Regency, NTT. This study used phenomenology design and was conducted in January to February 2018. The participants of this study were six patiens with diabetes mellitus type 2. Participants recruitment used purposive sampling technique and data were collected through in-depth interview. Data analysis used Van Manen's method. This study found 4 themes including, Psychological problem with a sub-theme the anxiety of illness; Self-efficacy with a sub-theme behavior selection; Social support with sub theme family and health practitioner support; Cultural influence with sub theme traditional medicine and diet selection. It was recommended that health practitioners especially nurses have to provide health education on the management of diabetes mellitus with considering local culture and emotional support as well.

## 1 INTRODUCTION

Diabetes mellitus (DM) is a group of metabolic diseases characterized by increased blood glucose levels/hyperglycemia (Hinkle & Cheever, 2014). Diabetes mellitus is a chronic disease that requires behavioral changes and lifestyles throughout the entire life span and becomes a major health problem for people throughout the world (Ignatavicius & Workman, 2010). According to WHO (2015), in 2012 there were 1.5 billion people in the world which died because of diabetes mellitus and as many as 80% came from countries with low to medium income. WHO estimates that diabetes mellitus disease will be the seventh cause of death worldwide in 2030. In Indonesia, based on the results of Riskesdas in 2013, there were 12,191,564 or as many as 6.9% of Indonesia's population suffering from DM disease. Indonesian people who have diabetes mellitus based on doctor's diagnosis are about 1.5% and in East Nusa Tenggara Province as much as 0.6% (Indonesian Ministry of Health, 2018). Patients with diabetes mellitus in Manggarai Regency increased from year to year, in 2014 and 2015 there were 612 and 1604 people, respectively.

Risk factors that cause diabetes mellitus are family history with a diabetic, race or ethnicity, age over 45 years, hypertension, high levels of high-density lipoprotein (HDL) cholesterol, triglycerides and lack of physical activity (Hinkle & Cheever; DeWit & Kumagai, 2013). Various complications can occur in clients with diabetes mellitus. These complications can be acute and chronic. Acute complication occurs when blood sugar level is suddenly high (hyperglycemia) or low (hypoglycemia) (DeWit & Kumagai, 2013; Hinkle & Cheever, 2014). The condition of severe hyperglycemia and hypoglycemia can treat diabetes mellitus clients. Hyperglycemia and hypoglycemia usually occur due to changes in the management of insulin therapy or oral antidiabetic drugs, diet and exercise. Chronic complications include macrovascular, microvascular and neuropathy diseases (Lewis, 2011; DeWit & Kumagai, 2013; Hinkle & Cheever, 2014).

Individu with diabetes mellitus has a very important role in comprehensive diabetes care. Diabetes self-management education (DSME) is a process that facilitates the knowledge, skills and abilities needed to help prediabetes and patients with diabetes to be able to treat diabetes (Haas, Mellinda, Joni, Cox, & Duker, 2012). Every individu

with diabetes mellitus has different experience in treating diabetes, which is influenced by various factors including attitudes or beliefs, cultural factors, self-efficacy, and social support (Kadirvelu, Sadasivan, & Hui, 2012, Mayberry & Osborn, 2012, Abolghasemi & Sedaghat, 2015). In a previous study conducted by researchers with the title, the effect of health education intervention and self-efficacy on changes in health behavior and blood sugar levels in diabetes mellitus patients in Manggarai Regency showed that based on paired t-test there were significant difference in knowledge, attitudes, eating patterns, physical activities, blood sugar, foot care and blood sugar levels before and after intervention with p value 0.000. However, the results of the one-year evaluation after the diabetes self-management education indicated that the majority of respondents (50%) included in the intervention group were not obedient in carrying out self-management (Ningsih, 2016). Based on observation of researchers, most respondents (50%) were not obey in carrying out self-management because cultural factors, social support, self-confidence and maladaptive coping when finding problems in self-management. It is needed to study the experience of patients with diabetes mellitus in carrying out self-management through phenomenology study. The aim of this study was to explore the experience of patients DM type 2 in Manggarai Regency in conducting self-management.

## 2 METHOD

The phenomenology design was used to explore the experience of patients with DM type 2 in conducting self-management and the Hermeneutic phenomenological method facilitates the formation of a complete interpretive description of the experience of diabetes mellitus patients in self-management (Van Manen, 1990, Streubert, Speziale, & Carpenter, 2007). The phenomenological approach of Van Manen (1990) focuses on four activities: turning to phenomenon of interest, explores participant's life experiences, reflects important themes of the phenomenon and describes his experience through writing and rewriting. Van Manen emphasizes research question and considers the relationship between the parts and the whole. According to Van Manen (1990) hermeneutic phenomenology is an attempt to build interpretative descriptions of several aspects of life. Therefore, the focus of this study is to explore the experience of patients with diabetes mellitus in self-management

that includes self-care behaviors such as diet, activity, treatment, control of blood sugar levels, and prevention of complications after diabetes mellitus patients get diabetes self-management education. The experience of becoming a diabetic and doing self-management after obtaining self-management education for improved outcome represent the phenomena of interest. The application of self-management in daily life to improve glycemic control and prevent complications from occurring is an interesting experience.

### 2.1 Participants

Participants in this study were type 2 diabetes Mellitus patients in Manggarai Regency. This study involved six participants. Participants recruitment used purposive sampling where researchers choose individually to participate based on criteria. The inclusion criteria in this study: diagnosed with type 2 diabetes mellitus, had no serious complications, had participated in the Diabetes self-management education (DSME). The exclusion criteria in this study were: not willing to be involved in the study, blood sugar levels < 70 mg/dl and hearing loss. The researcher obtained in-depth interview with participants in January-February 2018. Interview was conducted at the participant's home in the area on the City Health Center, Manggarai Regency, NTT.

### 2.2 Data Collection

Methods of collecting data through in-depth interview and the time for each participant about 45-60 minutes. Data recorded using an audio digital recorder. Demographic data including participant's identity, gender, age, occupation, marital status, education, duration of diabetes, type of medication consumed, and address of the participant were collected before interview. The focus of the question during interview is the experience of diabetes mellitus patients in carrying out self-management after getting DSME. The researcher also used field notes when interacting with participants to support transcript of data participants. The researcher explained the purpose of the study and description of the procedure for collecting data, then asked all participants for approval involved in the study by signing informed consent. Participants have the right to resign and refuse to provide information. The researcher has to exam blood sugar before the study to minimize the risk of incidence hyperglycemia and hypoglycemia. Participants who had blood sugar level < 70 mg/dl were not included in the study.

### 2.3 Data Analysis

Data analysis in this study used the method of Van Manen (1990). Analysis started since interview by researcher when actively listen and think about things that are said by participants. The Analysis process completely is conducted by converting interview data and field notes into the transcript. After making the complete transcript, the researcher met with the participant to validate the findings. The researcher then included some changes based on participant feedback. The process of data analysis for this study was continued by rereading the interview transcript after getting input from the participants. The next step in the analysis is data transformation or data reduction, where the researcher makes decision about what are relevant

and rearrange the interview related to the topic, eliminates irregularities and simplifies the language without changing the nature of the interview. The researcher then makes thematic analysis followed by coding in-by-line where the researcher underlines each sentence that indicated the same theme. The same themes are then grouped and divided into selected sub-themes. The final step is to write and rewrite documents based on research analysis by paying attention to diaries and field notes to support the interpretative process and the transformation of field texts into narrative texts.

## 3 RESULTS

### 3.1 Demographic Data

Table 1: Characteristics of Respondents with Type 2 Diabetes Mellitus in Manggarai Regency 2018 (n=6).

Participant	Age	Gender	Durasi of DM	Blood sugar	Medication
1	70	Male	3 years	250 mg/dL	Not taking drugs
2	38	Male	7 years	430 mg/dL	Metformin 3x1
3	40	Male	3 years	299 mg/dL	Metformin 1x1
4	67	Female	18 years	144 mg/dL	Metformin 1x1 Gilmepirid 1x1
5	43	Female	8 years	300 mg/dL	Metformin 2x1 Metformin 1x1
6	48	Female	14 years	419 mg/dL	Metformin 2x1 Metformin 1x1

Table 2: Identification of Themes Based on Experience of Type 2 DM Patients in Self-management (n=6).

The main thema	The sub thema
Psychological problems	the anxiety of illness
Self-efficacy	behavior selection
Social support	family support
Social support	health practitioner support
Cultural influence	traditional medicine selection
Cultural influence	diet selection

### 3.2 Thema Identification

In phenomenological research, interviewing is a means to gather information and develop a rich and deep understanding of the personal phenomenon (Van Manen, 1990). During the interview, the sharing experience of diabetes mellitus patients permits the researcher to get meaning the actual lived experience in self-management. The themes are understood as structures of the experience so that as one analyzes the phenomenon and determines the themes, the experiential structure are uncovered or revealed (Van Manen, 1990).The data analysis for this study will be reported as themes and sub theme. It was obtained 4 themes including, Psychological problem with a sub- theme the anxiety of illness; Self-efficacy with a sub-theme behavior selection;

Social support with sub theme family and health practitioner support; Cultural influence with sub theme traditional medicine and diet selection.

### 3.3 Psychological Problems: The Anxiety of Illness

This theme illustrates how participants feel anxious about diabetes mellitus disease experienced. Participant 2 said, "*after being diagnosed with diabetes mellitus, I felt shock and stress with the disease I was experiencing.*" Participant 4 said, "*at first I felt anxious, but because every month I controlled the doctor and the doctor always provided support and family support, now I have accepted my situation.*". Participant 5 said, "*at first I felt scared and anxious about the disease I was experiencing.*"

Participant 6 said, *"I was traumatized and stressed with the pain that I experienced."*

### 3.4 Self-efficacy: Behavior Selection

Based on the result of the study, some participants had low self-efficacy which affected the selection of bad behavior. Participant 3 said, *"I have consumed 1-2 glasses of alcohol almost every day since the end of September 2017. I also consume meat almost every day for the past one week. If at home I always follow the rules of eating, but if I am outside the house, I cannot follow the rules of eating."* If I gather with friends, I often consume roasted pork and consume alcohol and sweet cakes. I am very happy to consume sweet cakes. During holidays like Christmas, I also do not follow the dietary rules for diabetic patients. Participant 2 said, *"In my daily diet, I try to obey the recommended diet such as eating small portions of rice, eating more vegetables but sometimes when I'm hungry, I eat more than the recommended portion. In addition, when I visit a neighbor's house, I usually do not follow diet rules because I feel embarrassed and afraid to refuse the food served, especially offered by the "anak rona", even though the food is not good for my health such as beer and soft drinks. I feel embarrassed if I refuse the food given."*

### 3.5 Social Support: Family Support

This theme describes family support for participants. The finding of study showed, several participants received family support which had a positive impact on patients with diabetes mellitus. Participant 1 said, *"I always exercise every day which is walking for 30 minutes and exercising every month."* My child and my wife always support and remind me to exercise every day. Participant 4 said, *"I always get support from my family."* My child said, *"I am proud of my mom because my mother is not affected by the environment and always follows the diet recommended by the doctor."* However, there was one participant who did not get support from the family. Participant 6 said, *"there is no family that reminds me of a regular diet and taking medication."*

### 3.6 Social Support: Health Practitioner Support

The finding this study showed some participants did not get support from health care providers for self-management of diabetes mellitus. Participant 1 said, *"Every month I always follow prolanis but health*

*workers do not recommend me to take medicine regularly. "When our blood sugar levels are high, health care providers do not provide us with information about what we should do to reduce blood sugar levels. Health care provider does not provide information needed by participants cause wrong perception about treatment in diabetes mellitus. Participant 1 said, "I think if I go to the doctor every month and take medicine, I am afraid I feel dependent on drugs. "The medicine in my opinion is poisons and chemicals. "I once got sugar medicine but after I finished I didn't control anymore because my blood sugar was normal 130 mg/dl, so I didn't take medicine. "Participant 5 said, "I never took medicine. "I routinely take medicine for the last 2 years because according to the health worker, blood sugar is present and can go down again so I don't take the medicine."*

### 3.7 Cultural Influence: Traditional Medicine Selection

This study found that participants who consumed traditional medicine did not take oral antidiabetic drugs regularly which resulted in instability of blood sugar levels.

Participant 1 said, *"I once felt weak, had sweating and diarrhea. "This happened because I consumed dew drops of water which, according to people, can cure all diseases including the sugar that I experienced."* Participant 2 said, *"I consume traditional medicine because I feel after consuming traditional medicine I feel fresher and I feel that the drug can also reduce my blood sugar."* Participant 3 said, *since one Sunday ago I consumed traditional medicines to reduce blood sugar levels.*

### 3.8 Cultural Influence: Diet Selection

Based on the results of the study, 66.7% of respondents disobeyed the diet due to cultural factors. Participant 2 said, *"When I outside the house, I usually don't follow the diet rules because I feel embarrassed and afraid to refuse the food that is served especially offered by" anak rona ", even though the food is not good for my health such as beer and soft drinks. Participant 3 said, "that during this time I have consumed 1-2 glasses of alcohol almost every day since the end of September. "I also consume meat almost every day for the past week."* If at home I always follow the rules of eating, but if outside the house when with friends, I cannot follow the meal order and my habit when gathering

*with friends is to eat pork that is baked and consume alcohol and sweet cakes.” Participant 5 said, “When I visit neighbors, I always break the rules of eating like eating sweet cakes and feel guilty if I don’t eat food that has been served.”*

## 4 DISCUSSION

### 4.1 Psychological Problem: The Anxiety of Illness

Patients with diabetes mellitus generally had an experience psychological problem since being diagnosed. Nearly 20% of adult diabetic patients had an experience anxiety problem compared to individuals who do not have diabetes (Groot, Golden, & Wagner, 2016). Psychological problems such as anxiety in patients with diabetes mellitus affect the level of blood sugar, complications of diabetes mellitus and adherence to behavioral self care (Groot, Golden, & Wagner, 2016). Psychological problems in patients with DM must be addressed immediately because it can have an impact on poor glycemic control, increased complications of diabetes mellitus such as cardiovascular disease, increased health costs, and death (Groot, Golden, & Wagner, 2016). The results showed that there was a relationship between diabetes and various issues of mental health problems. These mental health problems relate to the experience of patients living with diabetes mellitus, difficulties in carrying out self-management, difficulties in social relations, anxiety due to increased blood pressure and hyperglycemia. Patients with diabetes mellitus who have mental health tend to have a high mortality rate, a high risk of cardiovascular disease and have a low quality of life. Risk factors for developing depression in patients with diabetes mellitus are adolescence, lack of social support, poverty, poor glycemic control, long suffering from diabetes mellitus, complications of diabetes mellitus (Robinson, Coons, & Heidi, 2108).

Psychological problems such as anxiety experienced by participants mostly occur due to difficulties in carrying out self-management due to poverty, low self-efficacy, lack of social support, poor glycemic control, long suffering from diabetes mellitus and having maladaptive coping mechanisms. Most of the people in Manggarai Regency is farmers with an average yield of < 1,000,000.00 per month that may affect the ability of patients with diabetes mellitus to carry out self-management. One participant said, *“I don’t control regularly to the doctor. I go to the doctor if I feel*

*unwell like dizziness or weakness. During this year, I have never had control. I have no health insurance, and I pay personally when I control the doctor or hospital. Low self-efficacy is also very influential on the mental health of patients with diabetes mellitus. Participants who have low self-efficacy will have an impact on poor glycemic control which can increase anxiety in diabetes mellitus patients. One participant said, “I can’t help myself eat sweet foods like cakes.” When there is an event like a party I cannot follow the recommended dietary rules and for 3 consecutive days, I consume pork at morning, afternoon and evening because there is a family event.*

The anxiety experienced by participants, mostly also due to poor glycemic control (83% with bleeding sugar > 200 mg/dl), duration of suffering from diabetes mellitus (67% > 5 years). One participant said, *“I just feel stressed if my blood sugar rises to 500 mg/dL and if my blood sugar rises, I only drink water because I’m afraid that if I eat then my blood sugar increases. I was scared and felt stressed when my blood sugar increased because if it wasn’t overcome I could coma and finally die.* Patients with diabetes mellitus who experience anxiety mostly have maladaptive coping mechanisms that can have a negative impact on health. One participant said, *“To relieve stress both stress due to illness, work and other problems I usually smoke. I smoke 2 ½ packs per day. I know smoking can be detrimental to my health but by smoking I feel the burden of illness, work and problems that I experience can be reduced.*

### 4.2 Self-efficacy: Behavior Selection

Self-efficacy is an individual's belief in his ability which is shown by the level of productive appearance that influences his life. The level of individual self-efficacy greatly influences the choice of individual behavior and motivation (Bandura, 1994). Self-efficacy is very important in self-management in patients with diabetes mellitus. Self-efficacy in diabetes mellitus patients is a special behavior that need to be built because has an important role in behavior change. Low self-efficacy affects individual efforts to carry out expected behavior and influences an individual's ability to survive in carrying out tasks when experiencing obstacles and failures. Increasing self-efficacy can improve individual adherence to treatment regimens for chronic diseases (Mishali, Omer, & Heyma, 2011; Beckerle & Lavin, 2013). Self-efficacy is indispensable in self-care behavior in patients with diabetes mellitus and plays an important role in shaping diabetes self-management that has an

impact on glycemic control. Bad behavioral self-care can affect mortality in patients with diabetes mellitus (Seo, Keumok, Kim, & Youngshin, 2017).

The research conducted by Masoompour, Trigari, & Ghanzanfari (2017) showed that there was a relationship between self-efficacy and self-behavior care in diabetic patients with  $p$  value 0.03. The research conducted by Seo, Keumok, Kim, & Youngshin (2017) indicated a significant relationship between health care provider communication, support from health care provider and self-efficacy in diabetes mellitus patients ( $p$  value  $< 0.001$ ). Other factors predicted to be related to self-efficacy include age ( $p$  value 0.003), religious beliefs ( $p$  value 0,040) and experience of having had diabetes mellitus education ( $p$  value 0.006). Patients who were older had greater diabetes self-efficacy (Seo, Keumok, Kim, & Youngshin, 2017). The mean age of the participants was about 51 years. In consideration of this, low self- efficacy on the participant may be occur because “aging” should have an adverse effect on the self- management capabilities of adult diabetic patients. Some participants have low self-efficacy, one of them may be influenced by lack of communication and support from health care providers. Participant 1 said, *“I don't take medicine regularly.” Every month I always follow Prolanis (Chronic Disease Management Program) but health workers do not recommend me to take medication regularly.” The health care provider also did not explain to us what we should do to reduce blood sugar levels.”* Participants have received diabetes self-management education, but health education regarding the management of diabetes mellitus is not given continuously by health care providers. Based on the observations of researchers, on prolanis activities followed by patients with diabetes mellitus, health care providers only check the blood sugar levels of patients with diabetes mellitus without providing diabetes-self management education on an ongoing basis.

### 4.3 Social Support: Family Support

Some theories argue that patients with diabetes mellitus really need social support in implementing self-care especially family support. Support from family members can have a negative or positive impact on the health of patients with diabetes mellitus. Family members can provide support to patients with diabetes mellitus (emotional, information and appraisal support) has been most strongly associated with adherence to self-care behaviors across chronic disease such as diabetes

mellitus) (Mayberry & Osborn, 2012). Research conducted by Mayberry & Osborn (2012) showed that some participants experienced frustrations due to not getting family support. Many factors can be barriers family support for patients with diabetes mellitus. There is lack of understanding diabetes mellitus, socially isolated or have conflicted family relationship, and multiple activity family roles themselves (parents, children and partners) (Kadirvelu, Sadasivan, & Hui, 2012). In consideration of this, lack of family support influenced by the family's low understanding of diabetes mellitus due to lack of information about the disease. Based on the observation of researcher, health care providers in both health centers and hospitals do not involve families in diabetes self-management education. The lack of knowledge from family members regarding the management of diabetes mellitus causes family members lack of participate in providing support to patients with diabetes mellitus in carrying out self-management of diabetes mellitus.

### 4.4 Social Support: Health Practitioner Support

Diabetes mellitus is a lifelong disease that requires support from health care providers in self-management. It would be logic to conclude that support from health practitioner is critical for effective patients with diabetes mellitus in carrying out self- management. The social support can be offered by health care providers includes positive support, emotional support, and information (Kadirvelu, Sadasivan, & Hui, 2012). Positive support includes choosing foods that are in accordance with diet, food portion, and blood sugar levels. Emotional support can be in the form of encouraging self-management, problem solving and making patients feel not alone in carrying out diabetes mellitus management. Support from health care providers can increase self- confidence and self-efficacy.

The research conducted by Seo, Keumok, Kim, & Youngshin (2017) showed that there is a significant relationship between health care provider communications, health care providers supports and self-efficacy in diabetes mellitus patients ( $p$  value  $< 0.001$ ). Support from health care provider is a very important factor in improving self-efficacy in patients with diabetes mellitus. Patients with diabetes mellitus who have good self-efficacy can improve adherence to self-management of diabetes mellitus. Based on observation of researcher, health care provider does

not support optimally both emotionally and information that is needed by patients with diabetes mellitus. Factors related to lack of emotional support and information are health workers do not have a specific time to discuss with patients about psychological problems or information needed in carrying out self- management.

#### **4.5 Cultural Influence: Traditional Medicine Selection**

Self-management is a very important factor in health care, especially for patients with chronic disease or non-communicable diseases such as diabetes mellitus. Every individu with diabetes mellitus has a culture that plays an important role in the treatment of diabetes mellitus. Cultural factors greatly influence individuals in carrying out self-management behavior (Kadirvelu, Sadasivan, & Hui, 2012). Cultural factors influence self-management behavior in the people of Manggarai Regency who have diabetes mellitus, especially in selection of traditional medicines for the treatment of diabetes mellitus.

The concept of health, wellbeing and illness people of Manggarai Regency are related to customs and culture. The people of Manggarai Regency still have the belief that the illness experienced including diabetes mellitus is a result of mistakes made in the past or due to curses from ancestors. The customs and culture have an effect on the selection of behavior some participants in the treatment of diabetes mellitus. Some participants consumed more traditional medicines that were recommended by "Shamans" who were believed to cure the disease.

#### **4.6 Cultural Influence: Diet Selection**

Adherence to the diet is one factor that can affect the stability of blood sugar levels and prevent complications in patients with diabetes mellitus. Cultural factors greatly affect individu with diabetes mellitus in carrying out adherence to the diet in certain situations such as at work lunches or family dinners, coworkers or activities related to customs that apply to certain cultures (Kollannoor-Samuel, 2011).

The pattern of life of the people of Manggarai Regency is related to the culture and customs that apply in the community. The Manggarai Regency community has a habit when a guest visits home. They always served coffee and food as a form of appreciation for the guests who come. Guests who come cannot refuse if offered to drink and eat food

that has been served including patients suffering from diabetes mellitus. In addition, most people in Manggarai Regency have the habit of drinking alcoholic beverages, smoking, and consuming pork in every custom event. Appreciation for custom makes the people in Manggarai Regency including those who suffer from diabetes mellitus involved in drinking alcoholic beverages and smoking in each customary event, even though this has an impact on their health. Patients with diabetes mellitus should be aware the potential specific effect of alcohol consumption. Alcohol can be absorbed before other nutrients. Large amounts of alcohol can be converted into fat and increase the risk of diabetic ketoacidosis. The main danger of alcohol consumption is hypoglycemia in patients with insulin therapy or drugs that increase insulin secretion by the pancreas. Alcohol can reduce the normal physiological reaction of the body to produce glucose. Therefore, diabetic patients who consumes alcohol on an empty stomach can cause hypoglycemia. Excessive alcohol consumption also reduces the client's ability to follow food planning and treat hypoglycemia. Other effects of alcohol consumption are overweight, hyperlipidemia, and increased blood sugar levels, especially when mixed with sweet liquor (Hinkle & Cheever, 2014). Patients with diabetes mellitus who have smoking habits are also at high risk of experiencing complications of macrovascular such as cardiovascular disease and strokes and microvascular complications such as diabetic neuropathy and foot problems (Hinkle & Cheever, 2014; Lewis, 2011).

## **5 CONCLUSIONS**

Participants provide information about the daily activities after getting diabetes self-management education including diet, medication, exercise, and sugar testing. This study showed that some participants experience anxiety about the condition of the disease. This greatly affects the behavior of participants in carrying out management of diabetes mellitus. Participants who experience psychological problems such as anxiety tend to have maladaptive coping mechanisms that have an impact on poor blood sugar control. Some participants do not take the recommended diet, medication regularly, and check blood sugar regularly. These are caused by several factors such as low self-efficacy, cultural influence, lack of family support, and health care providers. In carrying out the management of diabetes mellitus, individu with diabetes mellitus need support from both family and health care providers, so that individu

with diabetes mellitus do not feel alone in carrying out diabetes mellitus management. The result of this study obtained 4 themes including, Psychological problem with a sub-theme the anxiety of illness; Self-efficacy with a sub-theme behavior selection; Social support with sub theme family and health practitioner support; Cultural influence with sub theme traditional medicine and diet selection. Nurses need to provide sustainable health education for both patients and family with diabetes mellitus by paying attention to local customs and culture. Further researcher are advised to conduct quantitative research related to the role of culture, self-efficacy, and social support that influencing self-management of diabetes mellitus.

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