

Self-Care Experiences of Mellitus Diabetes in Jayapura City

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Diabetes mellitus is a disease marked by hyperglycemia and metabolic disorder of carbohydrates, fats and proteins that are associated with absolute or relative deficiencies of insulin activity and secretion. There are many practices that can be implemented to increase the health levels of diabetics and to prevent them from complications with self-care application. A diabetic health problem is accessible if diabetic routines in the exercise of self-care. This research uses qualitative methods with the phenomenology description approach with 5 diabetics in the city of Jayapura. The data analysis is done with the Colaizzi analysis technique. The results obtained are described in six themes, that are: diet arrangement, activity, foot care, drug approved, family support and the role of medicine. The self-care component has been used but still needs medical support and family support as a supporting system that is more important.

Key words: *diabetes mellitus, self-care.*

Preliminary

The World Health Organization (WHO) defines diabetes mellitus (DM) as a disease characterised by hyperglycemia and impaired carbohydrate, fat and protein metabolism associated with absolute or relative deficiencies of work and or secretion of insulin (Awad, Langi, Pandelaki, 2011 in eBM; 2013). Diabetes mellitus (DM) is a category of non-communicable diseases (PTM) which is a health problem at the global, regional, national and local level. Based on international diabetes federation data, there are 382 million people in the world who lived with diabetes in 2013. The number is expected to increase to 592 million in 2035.

Indonesia has 17,192 DM patients who had been diagnosed and 32,234 who had not been diagnosed but felt the typical symptoms of diabetes mellitus. There are various efforts that

can be done to improve the degree of health for people with diabetes mellitus and prevent various complications, one of which is the application of self-care. However, based on preliminary studies conducted by researchers in communities suffering from diabetes, the results found by researchers, most people with diabetes who have visited health centres and hospitals know about self-care but do not consistently apply it in their daily lives.

Research Method

In conducting research, researchers use qualitative research types. The subjects in this study consisted of 5 participants who were DM sufferers in Jayapura city. Data collection techniques used in-depth interviews by submitting an open-ended questionnaire. The research instrument used was the Human Instrument with the help of tools and field notes. The data analysis technique was adopted based on Colaizy's analysis technique which consisted of 7 steps of qualitative research.

Research Results

After conducting in-depth interviews 6 themes were successfully identified by researchers consisting of :

Theme 1: Dietary settings for DM. This theme consists of 3 sub-themes, namely portion, type and frequency of food.

Category	Sub Theme	Theme
3x1	Frequency	Dietary habit
<ul style="list-style-type: none"> ➤ Putih white rice ➤ Red rice ➤ Vegetables ➤ Fruits ➤ Oatmeal ➤ Animal side dishes ➤ Stew and clear 	Type	
Reducing rice	Portion	
<ul style="list-style-type: none"> ➤ Desire ➤ Taste continuous hunger ➤ Environment 	Factors affecting	

Servings

"If you eat as usual, only if your grandmother eats rice, they teach you not to eat a lot of rice, you can't either because rice is raising sugar (shaking your palms in front of your face)" (P1, P5).

"Oh, the usual amount is up to 3 times a day (raise eyebrows)" (P2, P3).

"I eat it a little son, if I'm hungry Yeah I eat 3 times a day but when it's late sometimes I don't eat, let me save it for the morning because if that night the sugar rises at night (frowning while shaking my head)" (P4).

Frequency

The five participants said they did not change the frequency of eating. Participant statements that do not change the frequency of eating as in the statement:

"Oh the usual number of times to 3 times a day (raised eyebrows)" (P1, P2, P3, P4, P5).

Type

Two participants claimed to consume brown rice:

"Ee since then I keep eating as usual yes (nodding my head) but I was chased by blood sugar it had to go down. I thought that in order not to bother me, I ate brown rice. Besides that, I also consume less sweet things because I myself already know that I can't eat sweets that are excessive" (P3, P5).

Two participants stated that they consumed white rice: "Eat yes, white rice, but I will take care of it properly. I also eat the fruit, usually order the non-watermelon dim seeds as a vegetable. If the egg is the apple in juice, that's it, my food, (nodding)" (P1, P4).

One participant said to use rice instead of food. This is one participant's statement about using rice to substitute food:

"I have not eaten rice since May 2017. Instead, I ate rice instead. So in the morning, I eat a Kueker or I eat boiled bananas but the banana is not too ripe (smile)" (P2).

Factors affecting the diet of people with DM

Three participants stated violating dietary arrangements due to the desire to eat:

"Papaya leaves are also not allowed but if grandma already wants to let me a little (stating the index finger with the thumb in front of the face) to be eating vegetables, just eat hahaha (laugh)" (P1).

"I, if I go to worship there is soup, I will continue to eat or if now there is takjil, if I want to buy it, for example, I will buy the compote, but I add warm water, then I eat (moving my hands, nodding and nodding) head)" (P2, P3).

One participant stated that a factor that inhibits dietary regulation is the hypoglycemic experience. The participant's statement about the hypoglycemic experience is:

"Oh, forbid children like to forbid (nodding head). But oma said just a little. So now the grandma has only 200 sugar, don't drop it to 200 down because if it reaches 200 down the oma is weak" (P1).

Two participants stated that the environment was one of the factors that influenced the diet. Participants' statements about the environment that affect their dietary settings are as follows:

"That, I bought meatballs with my son, he said, this mummy is eating so that what is important is for my taste. Poor mom for a long time not eating this food (voice getting smaller, in a sad tone)" (P4, P5).

Theme 2. Sports with DM

This theme consists of 3 sub-themes, namely Sports Type, Duration and influencing factors.

Category	Sub Themes	Themes
<ul style="list-style-type: none"> ➤ Walk ➤ Gymnastics ➤ Activity 	Type of sport	Sports
1-1,5 jam	Duration	
<ul style="list-style-type: none"> ➤ Environment ➤ Hobbies ➤ Ability 	Factors affecting	

Type of sport

The statement of one participant who regularly follows gymnastics is:

"He was routine, every Saturday I joined Prolanis (nodding and smiling)" (P2).

The statement of the three participants who viewed the activity as a form of exercise carried was as follows:

"Well the sport is to maintain the catfish, move there, move here (swinging your left and right hand). Because if you just can't move, there must be motivation from within to do it (moving your hands in front of your chest)" (P1, P3, P5).

Duration

One participant who routinely did sports stated the duration of exercise was 1-1.5 hours. The statement of the duration of the time of one participant's sport is as follows:

"That can be 1 - 1.5 hours of gymnastics because there are several sessions, there are stretches, warm-ups, joint exercises and so on, it's routine but because of this fasting month so take a break then finish fasting first and then continue the exercise on June 14th (staring up)" (P2).

Factors affecting

Statements of participants who did not exercise due to complications in their vision were:

"I can't exercise anymore, it's my eyes that I can't see well. I once hit a wall until my face was bruised. Yes because of this eye (shaking his head while holding the right eye)" (P 4).

Statements of participants who did not exercise due to complications in their vision are:

"I can't exercise anymore, it's my eyes that I can't see well. I once hit a wall until my face was bruised. Yes because of this eye (shaking his head while holding the right eye)" (P 4).

Participants' statements that do what they like and often do as sports as in the following statement:

"The way around here and there, when you go to worship, you like to walk (Pointing out of the house)" (P1, P3, P5).

Duration

One participant claimed to exercise for 1 - 1.5 hours:

"That can be 1 - 1.5 hours of gymnastics because there are several sessions, there are stretches, warm-ups, joint exercises and so on, it's routine but because of this fasting month so take a break then finish fasting first and then continue the exercise on June 14th (staring up)" (P2).

Factors affecting

Statements of participants who did not exercise due to complications in their vision are described in the following:

"I can't exercise anymore, it's my eyes that I can't see well. I once hit a wall until my face was bruised. Yes because of this eye (shaking his head while holding the right eye)" (P 4).

Participants' statements that do what they like and often do as sports as in the following statement:

"Most grandma goes to and from, if you go to worship, you like to walk oma (pointing out of her house)" (P 1).

"Well, that sport is to maintain catfish, move there, move here (swinging your left and right hand). Because if you just can't move, there must be motivation from inside to do it (moving your hands in front of your chest)" (P 3).

"But several times, I like to do work that makes people move, for example, a wooden saw, for a table to put the aquarium (pointing towards the aquarium), a table to put children's belongings. I like it and even though it's rare but at least there is sweat coming out like that" (P 5).

Statements of participants who need environmental support in the exercise of sports as in the statement:

"He is still routine but because this is the fasting month, he is resting again, and after the fasting month, he will continue his gymnastics activities on June 14th (moving his tag while nodding)" (P 1).

Theme 3. Compliance with medication

This theme consists of two categories, namely dose, and type of drug

Category	Sub Themes	Themes
3x1 2x1	Dose	Compliance with taking medication
Metformin	Oral medicine	
Fear of drug side effects	Knowledge	

Two participants stated adherence to the dosage of the drug taken before meals, according to the doctor's instructions as follows:

"Medicine, I have to take medicine. What do I drink? Eee if metformin 3x1 before eating (looking up)" (P2).

"Yes, the drug must always be taken continuously, there are 4, 3, 2 in the morning before eating again in the afternoon again 3 nights again 3 basically still taking until now including the sugar drug that continues to drink. can't take medicine, (counting with his hands, shaking his palms)" (P4).

Three participants stated non-compliance with the drug dosage as in the following statement: "This is the medicine given by the doctor from the first oma to seek treatment in Siloam first. Previously it was 3x1 a day, the doctor gave grandma. Now just at night, after eating (showing medicine in his hand) oma has been taking medicine for four years so afraid of kidney oma damaged (shrugging, shaking his head)" (P1).

"He was given the drug metformin. I was told to drink before eating but now I rarely consume because too much medicine can also damage the kidneys (bowing my head then shaking my head)" (P5).

"Medicine is also given by the doctor. Sometimes I buy it myself, I already know that this sugar needs this medicine. If I take the medicine, I also see the blood sugar, if it's 200, I won't reduce it again, then drop it (smile, move your hands)" (P3).

Theme 4. Foot care

Category	Theme
Washing the feet	Foot care
Use of footwear	

One participant, who performs foot care by maintaining the cleanliness of the skin of his feet is in the following statement:

"Nothing, only the doctor told me that I had to wash with baby oma soap because baby soap is not foaming so it's good for grandma nice feet (rubbing her feet)" (P1).

Statement of one participant who carries out foot care by using footwear to prevent trauma to the foot:

"These sandals let me accidentally step on sharp objects or something that can make a leg wound because often people have sugar rot on their feet even though it's just because of a small wound (nodding while raising one hand)" (P5).

Theme 5. Family support

This theme consists of three categories, namely assessment support, information support and instrumental support.

Category	Theme
Assessment	Family support
Information	
Instrumental	

Participant's stating that they have the support of the evaluation:

"My child is also obese, so he invited me too, he said, let's have our meals together. So now he also joins me not to eat rice too. (Nodding)" (P2, P4, P5).

Three participants said they received support in the form of information from their children if they no longer managed their diet properly. A statement of family support in the form of a ban is:

"Cien, if you have started asking for grandma fruit ice, he said, that sugar! hahaha, he likes to be angry when oma starts greedy Cien (Laugh)" (P1).

"He often banned children from eating sweet (nodding)" (P3).

"They get angry if they know, but if they don't know, I'll just stay quiet. But later I found out when I checked the sugar in the morning it must be high. If that's the case my child often says 'eat what?' Sugar is very high. There he also said not to drink coffee too much, it's not good so (nodding)" (P5).

Two participants expressed instrumental support from the family by stating:

"Cien usually goes to buy. So if the medicine runs out, Cien already goes to the K24 pharmacy. Take the sample of medicine and buy it. Because later he forgets if he does not bring the example hahaha (laugh)" (P1).

"Well often with auntie, (nod, dreamy). So if I want to go check sugar to the aunt's hospital often accompany" (P3).

"I checked it diligently, a few months after I was hit with sugar, my son is also a healthy person and he graduated from FKM. We bought a tool to measure himself at home so every morning his blood sugar was measured (Smile)" (P5).

Table 6. The Role of Health Workers

This theme consists of only one category, namely the role of health workers as educators.

Category	Theme
• Assessment	Family support
• Information	
• Instrumental	

Statement of the role of health workers as educators as in the statement:

"Because they teach nurses and doctors, don't eat too much rice, it shouldn't be either, because the rice is (raising the sugar level) (nodding, shaking the palms)" (P1).

"So it would be better for me to go to a doctor so people say confide it's important hahaha (laugh)" (P3).



"I checked in the city of the king because there was the head of the community health centers, he was good. He said, remember, don't get tired so you can get surgery, take care of your food too so that the sugar drops a little (nodding head, moving hands)" (P4).

"The name of information about health is important because we do not know what is good for us and the doctors and nurses know so if they advise it is important to obey (frowning, moving hands)" (P5).

One participant stated that he did not feel the nurse's role optimally in the statement: "If nurses don't, nurses only accompany doctors at that time".

Conclusion

The experience of self-care with diabetes mellitus consists of six components including diet control, medication adherence, exercise, foot care, and education.

Dietary settings are carried out by paying attention to the portion of food, type of food and frequency of eating where the implementation must pay attention to the glycemic index and glucose levels that the food has. Exercise by people with diabetes mellitus must pay attention to the duration and type of exercise. A good type of exercise is an aerobic type of exercise because this type of sport is a type of exercise that uses glucose as a source of energy. The duration required for people with diabetes mellitus to exercise is 150 minutes per week.

All participants stated adherence to the type of drug that is consuming OHO which is Metformin but did not comply with the dose by changing the dose as they wish. Foot care includes washing, washing feet and then using footwear as a protective measure against trauma.

The role of the family is to provide support to carry out self-care. Family support provided in the implementation of self-care in the form of assessment support, information support, and instrumental support.

Health workers act as educators, where nurses and doctors provide education to people with diabetes mellitus regarding the implementation of appropriate self-care.

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