THE RELATIONSHIP OF FAMILY SUPPORT AND SELF-EFFICACY WITH THE QUALITY OF LIFE OF ELDERLY PEOPLE WITH DIABETES MELLITUS

Rahmi Inayati[1], Hizir[2], Marthunis[3], Teuku Tahlil [4,]
Univeritas Syiah Kuala[1,2,3,4]
rahmi.inayati@unimal.ac.id[1], hizir@usk.ac.id[2], marthoenis@unsyiah.ac.id[3], ttahlil@unsyiah.ac.id[4]

Abstract

Elderly is a person who has entered the final phase of life, where almost all the elderly are diagnosed with a disease, one of which is diabetes mellitus. This study aims to find out the relationship between family support, self-efficacy, and the quality of life of elderly people with diabetes mellitus in their area of work, Puskesmas Tangse. The research method uses an analytical survey method with a cross-sectional approach. The population in this study is the total age of people suffering from diabetes mellitus in the working area of Puskesmas Tangse, which is as many as 939 elderly. The sampling technique in this study uses purposive sampling of 100 elderly people. The research was conducted from April to September 2023. The results of this study show that there is a relationship between family support and self-efficacy with the quality of life of elderly people with diabetes mellitus, with a P-value of 0.000. The conclusion of this study is that there is a relationship between family support and self-efficacy and the quality of life of the elderly with diabetes mellitus.

Keywords: Family support, Self-efficacy, Quality of life, Elderly

Introduction

The increase in the elderly population in Indonesia will be 48.2 million people (15.77%) by 2035. (Kemenkes RI, 2019). According to the World Health Organization (WHO), the number of people with diabetes mellitus in 2015 has reached 415 million and is estimated to reach 642 million by 2040. (WHO, 2016). The prevalence of elderly people with diabetes mellitus in Tangse district is as high as 3,647 people (Dinkes Kabupaten Pidie, 2022).

Quality of life is the state of an individual's mental function and well-being. Quality of life becomes one of the factors that influence the status of one's health. (Nuraisyah et al., 2017). According to Alfian (2018), which notes that 76.8% of people with diabetes mellitus have a quality of life below average or are in the bad category, Decreased quality of life in diabetics causes patients to experience anxiety, despair, and depression while undergoing blood sugar control, diet, treatment, and medical care throughout their lives. (Novi, 2019).

Efforts to control diabetes mellitus are an important goal in reducing complications that will make the burden very heavy for individuals and families. One of these controls requires family support. (Khasanah, 2019). Family members are the primary source of instrumental and emotional support. Support tools also include assistance in completing patient-specific tasks, such as emotional backing, which includes providing comfort and support if patients experience stress or frustration during their long-term diabetes management, affecting family diabetes care policies, and including providing diabetes education to family members as part of a patient's diabetes treatment plan. (Pamungkas, 2017).

According to Rahman (2017), 83% of people with diabetes mellitus know that their quality of life depends on compliance, educational level, and self-efficiency. In elderly people with diabetes mellitus, when their glucose levels are uncontrolled, it can lead to the development of complications of diabetes mellitus, and the form of support that can be given so that the quality of life of the elder remains at its maximum is self-effectiveness. Self-effectiveness is a person's confidence in their ability to perform a task and achieve the desired result. (Ramadhani, 2016). According to Anindita's (2019) research, the self-efficacy rate of people with poor diabetes mellitus is up to 65%. Self-efficiency can help patients control 95% of their illnesses, and their motivation to conduct healthy behavior increases (Erniatin, 2018). (Wardiyan, 2018).

The Consept of Elderly

Elderly is someone who has entered the final phase of life (Nawang, 2021). Lansia is a condition that occurs in human life. The elderly classification is divided into four groups, namely: middle age, that is, the age group 45–59 years; elderly, that is, the age group 60–74 years; old age, 75–90 years; and very old age, that is, the age group over 90 years. The aging processes that occur in the elderly directly or indirectly will affect certain changes, such as physical changes, cognitive changes, and psychosocial changes (Widi, 2021), that is, physical and cognitive changes. Diabetes mellitus (DM) is a metabolic disease characterized by high blood glucose levels (hyperglycemia) due to insulin secretion disorders, insulin abnormalities, or a combination of both. (American Diabetes Association (ADA), 2018). Three major acute complications of DM associated with short-lived glucosa imbalances are hypoglycemia, diabetic ketoacidosis (DKA), and hyperglycemic hyperosmolar nonetotic syndrome. DM is also associated with an increased incidence of

macrovascular diseases such as coronary artery disease (myocardial infarction), cerebrovascular disease (stroke), and peripheral vascular disease. (Smeltzer, 2013). Family support is the most important part of a family. Because family support for health can have a positive impact on health (Sangian et al., 2017), Family support becomes the greatest influence on patient recovery. Without family support, the success of healing will be smaller (Wardhani, 2018). (Artamia et al., 2019). Self-effectiveness is defined as confidence in understanding and managing a disease and can greatly influence an individual's knowledge of the disease and the importance of adherence to treatment, especially for chronic diseases such as diabetes. (Shen et al., 2018). Self-effectiveness in nursing intervention approaches focuses on managing patient confidence in their ability to regulate, plan, and change behavior so that a good quality of life is achieved. (Ghufron, 2017). Quality of life is the reaction of every individual in life who has a purpose for life, attention, and hope. This can affect physical, mental, social, and environmental health. (Almeida, 2017). Here are some factors that can affect the quality of life (Jacob, 2018): gender, age, educational level, long-standing suffering from DM, employee, and socio-economic status. Hypothesis: Ha: There is a relationship between family support and the quality of life of Lansia sufferers of diabetes mellitus, and Ha: There is a relationship between self-efficacy and the quality of life of Lania sufferers of diabetes mellitus.

Research Methods

The research methods used in this study are analytical surveys with cross-sectional approaches. (Notoatmodjo, 2018). The population in this study is the total elderly suffering from diabetes mellitus in the Puskesmas Tangse Working Region, which is 939 people. The sample that will be used in this study is as many as 100 seniors using purposive sampling techniques (Priyono, 2016). The research instrument is a questionnaire. The family support variable questionnaire in this study was adopted from the HDFSS (Hensarling Diabetes Family Support Scale), developed by Hensarlings (2007) and modified by Yusra (2011). It involves the emotional dimension of 8 questions (item number 4, 5, 6, 7, 8, 9, 10, 11), the reward dimension of 7 questions (point number 12, 13, 14, 15, 16, 17, 18), the instrumental dimension of seven questions (pot number 19, 20, 21, 22, 23, 24, 25), and the information dimension of 3 questions. (item no. 1, 2, 3). The total number of family support items is 25 questions using an alternative answer scale. 4-likert, i.e., “always” is given a rating 4, “often” is awarded a rating 3, “invalid” is paid a rating 2, and “never” is granted a

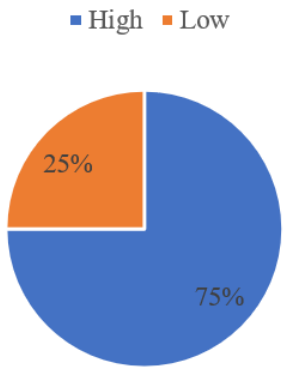
score 1. The self-effectiveness variable questionnaire in the study is adopted from the journal of the NERs community, i.e., the DMSES questionnaire (Diabetes Mellitus Self-Efficacy Scale), which provides alternative responses using the 5-likert scale with five options of answers. i.e., “not sure” is provided a rating 1, “less sure” has been given a score 2, “sufficiently sure” gives a score 3, “confident” has a score 4, “very confident” gives the rating 5. The questionnarium consists of 20 questions with 4 sub-scales, namely nutrition (items 4, 5, 9, 10, 13, 14, 15, 16, 17), weight and physical exercise (items 6, 8, 11, 12), medical treatment (items 19, 20), and blood sugar and foot test (items 1, 2, 3, 7). The variable quality of life questionnaire adopted from the Chusmeywati (2016) study is a DQOL (Diabetes Quality of Life) questionnaire with 12 questions providing alternative answers on a 5-likert scale, namely “very satisfied” given a score of 5, “sufficiently satisfied”, given a rating of 5, „normal,” given a rating of 3, “suficiently dissatisfied,” awarded a score of 2, and "unsatisfied,“ given a value of 1. The way the data is collected is by giving a consent sheet to be signed to respondents and accompanying respondents in the filling of questionnaires with interview leads. The stages are: preparation stages of data collection, data processing, and data analysis.

Discussion

The Results of Univariat Analysis

a. The Quality of the Elderly’s Life

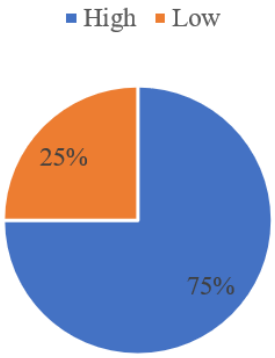
Grafik 1.1
Frequency Distribution of Quality of Life of DM Patients



Source: Primer Data, 2023

b. The Support of Elderly's Family

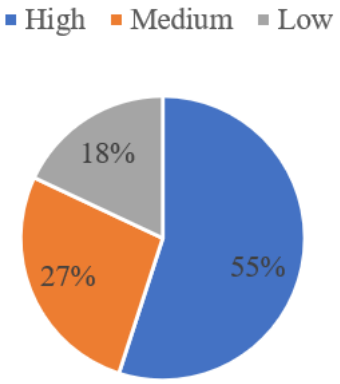
Grafik 1.2
Frequency Distribution of the Family Support of Elderly DM Patients



Source: Primer Data, 2023

c. Elderly's self-effectiveness

Grafik 1.3
Frequency Distribution of Self-Effectiveness of Elderly DM Patients



Source: Primer Data, 2023

1. The Results of Bivariat Analysis

Grafik 1.4 shows that of 100 seniors, 75 seniors with high family support are the majority of seniors in the good quality of life category of 74 people (98.7%). The statistical test results with a 95% confidence rate obtained a P-value of 0.000 < 0.05 (α value). So it can be concluded that Ha is accepted, which means there is a relationship between family support and the quality of life of the elderly with DM.

Grafik 1.4
Relationship of Family Support with the Quality of Life of DM patients

Family Support	The Quality of Elderly's Life						*P-value*
					Total		
	Good		Poor				
	f	%	f	%	f	%	
High	74	98,7	1	1,3	75	100	0,000
Low	2	8	23	92	25	100	

P-value < 0,05 Based On Uji Chi Square

Grafik 1.4, 55 elderly with high self-effectiveness were the majority of elders with a good quality of life category of 49 (89.1%). 27 elderliers with moderate self-efficacy were a majority in the category of good life quality of 22 people (81.5%). 18 elderlies with low self-efficiency were most of the elderliners with a bad quality of living category of 13 people (72.2%). The statistical test results with a 95% confidence rate obtained a P-value of 0.000 < 0.05 (α value). So it can be concluded that Ha is accepted, which means there is a relationship between self-effectiveness and the quality of life of the elderly with DM.

Quality of life of elderly DM patients

The results of the study showed that of the 100 elderly, the most predominant elders were those with a good quality of life category of 76 people (76%). Quality of life is defined as an individual's perception of their position in life in the context of the cultural and value systems in which they live and in relation to their goals, standard expectations, and concerns. Quality of life greatly affects people with diabetes mellitus, including physical health, psychological health, resistance to depression, and quality of life. (Nursalam, 2017).The poor quality of life is due to the patient's perception of the disease he suffered has not improved in terms of healing and the patient feels angry, embarrassed, desperate, and feel that no family cares about the improvement of his health thus affecting the quality of living of the sufferer. The quality of life is very important because the quality of living is something that is closely related to the condition of the sufferer, the severity of the disease, the length of healing even can exacerbate the disease condition when the patient has a bad lifestyle.

Grafik 1.5
Self-efficacy Relationship to the Quality of Life of DM patients

Self-efficacy	The Quality of Elderly's Life						*P-value*
					Total		
	Good		Poor				
	f	%	f	%	f	%	
High	49	89,1	6	10,9	55	100	0,000
Medium	22	81,5	5	18,5	27	100	
Low	5	27,8	13	72,2	18	100	

P-value < 0,05 Based on Uji Chi Square

The results show that the most predominant elderly are those with a high family support category of 75 (75 per cent) compared to those with low family support of 25 (25 per cent).

Self-effectiveness of elderly DM patients

The results of the study showed that the most dominant elderly were elders with a high self-effectiveness category of 55 (55%), compared to the average elder who had self-efficiency of 27 (27%) and the elder with low self-efficiency of 18 (18%).

Self-effectiveness in the elderly with diabetes mellitus is considered an important factor in initiating and maintaining self-care activities (Hager et al., 2019). In other words, self-efficacy in the diabetic is the perceived belief that a person has the ability to achieve the goal of treatment that is controlled blood sugar levels. (Sousa et al., 2020).

High levels of effectiveness will affect the elderly with diabetes mellitus in making decisions related to the behavior to be done by controlling their blood sugar levels to stay within the normal range, so that older people can enjoy their old age well even with diabetes. On the other hand, when the level of self-efficacy is low, the elderly cannot control their blood sugar levels properly, so they will continue to suffer from deteriorating health conditions.

Relationship of family support with quality of life of elderly DM patients

The results of the study showed that 75 elderly people with high family support were the majority of those with a good quality of life category of 74 people (98.7%). The statistical test results with a 95% confidence rate obtained a P-value of 0.000 < 0.05 (α value). So it can be concluded that Ha is accepted, which means there is a relationship between family support and the quality of life of the elderly with diabetes mellitus in the Puskesmas Tangse Working Region.

The lower the family support given to the elderly will have an impact on their physical and mental health, but if the family's support is high, then they will feel loved and appreciated. The important role of family support in improving the quality of life of people with diabetes mellitus involves adjusting psychological aspects and promoting behavioral change. The family serves as the primary source of support for patients with diabetes mellitus.

The relationship of self-effectiveness with the quality of life of Elderly DM patients

The results of the study of 55 elderly people with high self-efficacy were that the majority of elders with a good quality of life category were 49 people (89.1%). 27 elderlies with moderate self-efficacy were most of the elderlies in the category of good life quality of 22 people (81.5%). The statistical test results with a 95% confidence rate obtained a P-value of $0.000 < 0.05$ (α value). So it can be concluded that Ha is accepted, which means there is a connection between self-effectiveness and the quality of life of the elderly with DM in the Puskesmas Tangse Work Area.

The higher the self-efficacy, the better the quality of life, but the lower the efficiency, the worse the quality. The low level of self-efficiency in the elderly with diabetes mellitus will set its ability to do the sedimentation of diabetes mellitus so that it can improve the quality of life. SS

Conclusion

1. There is a relationship between family support and the quality of life of Lansia in the Tangse Puskesmas Working Area, with a P-value of $0.000 < 0.05$ (value α).
2. There is a relationship between self-efficacy and the Lansia Quality of Life in Tangse Working Zone, with a P-value of $0.05 < 0.05$.

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