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THE RELATIONSHIP BETWEEN SELF-CARE MANAGEMENT AND QUALITY OF LIFE IN DIABETES MELLITUS PATIENTS IN IBNU SINA GRESIK HOSPITAL

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Research Report

A B S T R A C T

Introduction: Non-adherence to self-care is often found in diabetes mellitus (DM) patients. Non-compliance in DM patients in performing self-care can affect the quality of life of patients. This study aimed to explain the relationship between self-care management and the quality of life of DM patients. **Methods**: This research design was analytically observational with a cross-sectional approach. The sample in this study was 80 respondents of DM patients treated at RSUD Ibnu Sina Gresik with a purposive sampling technique. They collected data using a questionnaire and statistical test of this study using the Spearman test. **Results:** The results are that the majority of self-care management is sufficient (67.5%) for as many as 54 people and good quality of life (86.2%) for as many as 69 people. The results of the correlation test using the spearman test obtained a p-value of 0.000 (p-value <0.05), and the correlation coefficient value is positive (r=0.479), which means that there is a significant relationship between self-care management and the quality of life of patients with diabetes mellitus in RSUD Ibnu Sina Gresik. **Conclusions**: Improved self-care management is associated with improving the quality of life of patients with diabetes mellitus in RSUD Ibnu Sina Gresik.

INTRODUCTION

Non-adherence to self-care is often found in patients with diabetes mellitus (DM). Based on the results of research on self-care adherence in DM patients, it is stated that only about 7-25% of DM patients are obedient to all aspects of self-care behavior. About 40-60% in diet failure, 30-80% non-adherent to blood sugar control and 70-80% non-adherence to exercise (Fahra et al., 2017). The non-compliance of DM patients in self-care can affect the quality of life to be low. The fulfillment of self-care factors that are carried out consistently, it can avoid disease complications that can have a fatal impact on many organs throughout the body. Complications can have a prolonged impact on the patient, both physically and mentally, thereby reducing their quality of life (Luthfa & Fadhilah, 2019). The longer the patient suffers from DM, the lower the patient's quality of life because the more complications that will arise. The importance of improving the quality of life of DM patients because the quality of life is very closely correlated with response to therapy, disease progression and even death due to DM where the lower a person's quality of life, the higher the risk of illness and even death (Teli, 2017).

The incidence of DM in the world continues to increase, the latest data from the World Health Organization (WHO) shows that in 2000 as many as 150 million people in the world suffered from DM and this figure will be doubled in 2025 from this figure as much as 90% to 95% (IDF, 2019). Indonesia ranks fourth in the world with the number of people with DM reaching 8.6% with a total of 10.7 million people in 2019, and will increase in 2035 to 14.1 million (PERKENI, 2015). In the last 20 years, in East Java there was an increase of 329.8 with the prevalence of DM reaching 10.7% (Riskesdas, 2018).

Self-care management is influenced by factors that determine self-care behavior such as predisposing factors (knowledge, attitudes, motivation, self-efficacy), enabling factors (patient communication with doctors/health workers) and driving factors (family support) (Green, M. W. Kreuter, 1980). On the quality of life can be influenced by aspects of the existence of special needs that are continuous in the treatment of DM, symptoms may appear when blood sugar levels are

unstable, complications due to and sexual dysfunction (Yudianto K, Rizmadewi H, 2008). With the fulfillment of self-care factors that are carried out consistently, it can avoid disease complications that can have a fatal impact on many organs throughout the body. Complications can have a prolonged impact on the patient, both physically and mentally, thereby reducing their quality of life (Luthfa & Fadhilah, 2019). The longer the patient suffers from DM, the lower the patient's quality of life because the more complications that will arise. The importance of improving the quality of life of DM patients because the quality of life is very closely correlated with response to therapy, disease progression and even death due to DM where the lower a person's quality of life, the higher the risk of illness and even death (Teli, 2017).

Diabetes Mellitus Control can be done through prevention and control using the basic principles of diabetes mellitus control management which includes lifestyle modification, by changing an unhealthy lifestyle to a healthy one in the form of diet (diet), physical exercise or physical exercise, and consumption compliance. antidiabetic drugs. Self-care that can be done by DM patients includes diet or eating patterns, exercise, monitoring blood sugar levels, drug therapy, and diabetic foot care (Chaidir et al., 2017). Many studies have proven that self-care improves quality of life by reducing pain, anxiety and fatigue, increasing patient satisfaction (Asnaniar & Safruddin, 2019). Diabetes self-care can effectively reduce the risk of DM sufferers to the incidence of coronary heart complications, besides that self-care can also control normal blood sugar levels, reduce the impact of problems due to DM,

and reduce mortality due to DM. So if self-care is carried out properly, it will improve the quality of life of the patient. On the other hand, poor self-care will have a negative impact on the quality of life of patients with diabetes mellitus. Self-care that is done seriously, can have a good impact on improving the quality of life. The purpose of this study was to analyze the relationship between self-care management and the quality of life of DM patients.

MATERIALS AND METHODS

The design of this study used a correlation research design approach: non-experimental analytical survey with a cross sectional approach which aims to determine the relationship between 2 different variables, namely self-care and quality of life in Diabetes Mellitus patients. The population in this study were all diabetes mellitus patients who were in in RSUD ibn Sina Gresik Regency with the last sampling in this study using the Slovin formula obtained as many as 80 respondents with purposive sampling technique. Collecting data using 2 different questionnaires, namely Self-care measurement using a modified questionnaire from the SDSCA (Summary of Diabetes Self Care Activities), which was developed by Toobert, Hampson and Glasgow (2000) and the Instrument for the dependent variable of quality of life using the WHOQOL- BREF development of the WHOQOL-100 instrument. consists of 22 questions. Furthermore, the data were analyzed and statistical test using the spearman test. This research was declared ethically feasible by the Health Research Ethics Commission of Ibnu Sina Hospital Gresik.

RESULTS

Table 1. Demographic characteristics ofpatients with diabetes mellitus at RSIS Gresik

Characteristic	f	(%)
Age		
31 – 40 years	7	8.8
41 – 50 years	19	23.8
51 – 60 years	25	31.2
>60 years old	29	36.2
Gender		
Male	36	45
Female	44	55

Based on the table above, it was found that the majority of respondents were female in the age category > 60 years.

Table 2. Self-care in Diabetes Mellitus Patients at Ibnu Sina Hospital

Self care	f	(%)
Good	26	32.5
Enough	54	67.5
Total	80	

The table above shows that most respondents at Ibnu Sina Hospital had enough scores in nursing behavior.

Table 3. Quality of Life in DiabetesMellitus Patients at Ibnu Sina Hospital

Quality of Life	f	%
Good	69	86.2
Enough	11	13.8
Total	80	100.0

The table shows that most respondents with diabetes mellitus have a good quality of life with a frequency of 69 people (86.2%). Based on the results of the cross tabulation of the relationship between self-care management and quality of life of diabetes mellitus patients at RSUD Ibnu Sina Gresik, it could be seen that 15 respondents with good self-care and good quality of life, followed by respondents with enough self-care and good quality as many as 54 people. Spearman Rho's analysis shows p value = 0.000 and the correlation coefficient value is 0.479 with a positive correlation direction, meaning. There is a positive relationship between self-care management and quality of life in patients with diabetes mellitus (table 4).

Table 4. Cross-tabulation results between the relationship between self-care management and quality of life of diabetes mellitus patients at Ibnu Sina HospitalGresik.

Management Self care	Quality of Life			Total
	Not enough	Enough	Good	
Enough	0	0	54	54
Good	0	11	15	26
Total	0	11	69	80
		r=0.479,	p=0.000	

DISCUSSION
Self-care in Diabetes Mellitus at Ibnu Sina Hospital Gresik

Based on the results of research that has been carried out at the Ibnu Sina Gresik Hospital on the management of self-care behavior of diabetes mellitus patients which was carried out using a questionnaire, it showed that 26 people with diabetes mellitus (32.5%) were in the good category in self-care behavior and the majority were in the category of self-care behavior. greater in the sufficient category for 54 people (67.5%). It is found that respondents are more routine in checking blood sugar and planning a healthy diet and eating pattern. In addition, nurses also play an important role in increasing patient understanding of the importance of maintaining DM management through self-care. The results obtained by the researchers were, self-care activities that were able to be carried out by respondents every day were controlling blood sugar levels to prevent complications, diet planning, calorie restriction, physical exercise, cleaning the feet, and drying between the toes after washing.

Quality of Life in Diabetes Mellitus at Ibnu Sina Hospital Gresik

Based on the results of the distribution of the quality of life above, it was obtained that most of the respondents as many as 69 people (86.2%) had a good quality of life. Where the majority of respondents have a good quality of life. It is found that there are several factors that affect the quality of life of patients with diabetes mellitus such as psychological support and social relationship support from family and relatives. This is in line with research conducted by Joyce et al (2015), that the results of thedistribution data and frequency of respondents' quality of life obtained a good quality of life with a value of (63.3%). It can be seen from the aspect of social and environmental relations that respondents are satisfied with their social support. According to Polonsky, in Yusra (2010) quality of life is an individual's feeling about his health and well-being which includes physical function, psychological function and social function. Quality of life can be defined as the degree to which an individual enjoyshis life which consists of the satisfaction and impact that an individual feels in carrying out his daily life.

Relationship between self-care management and quality of life of diabetes mellitus patients at RSUD Ibnu Sina Gresik

Based on the analysis of the relationship between self-care and quality of life of diabetes mellitus patients, 25 respondents with good self-care and good quality of life, 11 respondents with good self- care and adequate quality of life, and the

remaining 11 respondents with good self-care. sufficient and good quality as many as 54 people. According to researchers, differences in quality of life in DM patients can be influenced by several factors such as age, gender and lack of awareness in carrying out aspects of self-care. The respondent's lack of awareness is dominant in the aspect of periodic sugar checks and foot care.

Based on the results of statistical tests that have been carried out using the Searman Rank Correlation test, the results obtained are p-value 0.000 or p-value <0.05, and a correlation coefficient of 0.479. Thus,the accepted result means that there is a significant relationship between self-care and the quality of life of diabetes mellitus patients at home. Ill Ibn Sina Gresik.

The results of this study found self-care is of sufficient value. Where the majority, the results show thatmore respondents plan their diet/diet for the last seven days. Setting a diet where the right number of calories are consumed per day, avoiding sugary foods and high-calorie foods. Some respondents also said that during the last seven days they rarely or even never ate snacks/snacks containing sugar. In theresults of this study, it was found that the majority of respondents always did physical activity/sports exercise every day for the past one week. Physical activity / exercise is useful for controlling blood sugar remains stable and plays a role in weight loss, lowering blood glucose levels, and increasing blood pressure. While the physical activity that respondents do every day is doing physical activities such as sweeping, mopping, walking, cycling and others.

Based on the results of the study, it was found that the value of the quality of life was of Good value. The factors that affect the quality of the respondents are psychology, social relations, and their environment. According to researchers, the higher the level of patient self-care in the hospital, the higherthe number of dependence on the hospital and of course it is necessary to maintain hospital services, so that patients are satisfied with the service. However, it is expected to be able to provide information and invite DM patients to be able to increase self-care activities independently in patients carried out optimally so that complications can be minimized and improve the quality of life for DM patients to live a normal life.

CONCLUSIONS

It can be concluded that diabetes mellitus patients at Ibnu Sina Gresik Hospital mostly have sufficient Self-Care Management, most of Diabetes mellitus patients Ibnu Sina Gresik Hospital has a good quality of life and there is a significant relationship between self-care management and the quality of life of diabetes mellitus patients at Ibnu Sina Gresik Hospital.

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