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## Self Efficacy Related to Self Management on Diabetes Mellitus Type II

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### Abstract

Degenerative disease occur frequently to people who has unhealthy life style. Degenerative disease is unctagious disease, and Diabetes Melitus is one of them. The aim of this study was to know correlation between self efficacy and self management on DM type II patients in puskesmas saronggi area. This study was analytic observational study with correlational approach. Total population in this study were 259. simple random sampling technique had used in this study. And so 72 samples has choosen. Questionnaires has used to measure the correlation between self efficacy and self management. The data analized by Rank Spearman test. The result of the study showed that most of DM type II patients in saronggi have good self efficacy, and almost all respondents have great self management. The result of analizing data about correlation between self efficacy and self management showed  $p=0,020$  ( $\alpha < 0,05$ ), therefore there was correlation between self efficacy and self management on DM type II patients. Thus self efficacy and self management become patients basic component on conducting diabetic program. Health staff could held accompaniment which can improve patients self efficacy in order to increase their great self management. Accompaniment to improve patients self efficacy may include health promotion and education about how important to improve their self management.

**Keywords :** Self Efficacy, Self Management, DM Type II

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## INTRODUCTION

Degenerative disease occur frequently to people who has unhealthy life style. Degenerative disease is unctagious disease, and Diabetes Melitus is one of them. Untreated Diabetes could become serious threats. Several accute metabolic complication because of high blood glucose (hyperglycemic) is diabetic ketoacidosis and long term hyperglycemic condition.

Diabetes is one of chronic disease due to pancreas inability on producing insulin, body innefficiency on using insulin. And diabetes is one of four unctagious community health disease which became world priority because of the prevalence and increasing case number annually (Khairani, 2018)

Diabetes mellitus type 2 focussing on preventing or decreasing the risk of complication by controlling their own condition such as blood pressure, lipid level, and glucose controlling. There are several inhibition gaining maximum care on DM type II patients, including medical care insufficient, poverty, minimum self esteem and insufficient social support (Tinoco, 2020)

According to international diabetes federation (IDF) the number of people in the world who died because of diabetes increase to 245 millions in 2017 even there are many people unaware that they had this disease. In Indonesia according to data riset kesehatan dasar 2018 Indonesia ranks number 6, with rapid increase from over 5 years, this comparation including, in 2013''prevelence of diabetes mellitus on mature citizen 6.9% with prevalence number increasing to 8.5% in 2018 (international diabetes federation 2017). While in east java diabetes mellitus incidences increasing in 2018 became 2.6% which before was 2,1 % in 2013.

According to data acquired from Dinas Kesehatan Kabupaten Sumenep, in 2019 there were (15.497) people diagnosed with diabetes mellitus. And it increase in 2020 which was reached (43.567) people with prevalence number in d kabupaten sumenep 97,6%.

The result of Dinas Kesehatan Sumenep study in 2020 showed the highest number of diabetic patient who had given care were in kecamatan Gapura (15,383) patients, Kalianget (10,486) patients, Gili genteng (3,270) patients, Ambunten (3,227) patients and Saronggi (2,693) patients, Leggung

(1,416) patients, Gayam (1,299) patients. According to data summary of diabetes patients in puskesmas saronggi area, it ranks number 9 in 2019 there were 438 people diagnosed DM with prevalence number of people with DM in puskesmas saronggi 42,9%. And incident number of this case increase to 2,693 and Ranks number 5 in 2020 with 25,896 population.

Management of patients with type II diabetes mellitus is to prevent and slow down complications that arise by implementing self-management behavior in the patient's life, for example a healthy diet, good physical activity, monitoring blood sugar and using health services. Apart from some of the behaviors mentioned above that are able to prevent the disease, high self-efficacy abilities that are able to increase self-confidence are an influence in the process of fulfilling self-management in DM patients (Kallo, 2019).

The healing process or long treatment can cause psychological problems that affect the patient's self-efficacy, so that self-care management in diabetes mellitus patients cannot run well in carrying out self-management. The absence of proper handling of diabetes will cause general complications, namely micro vascular complications and macro vascular complications and even lead to death. Therefore, patients diagnosed with diabetes mellitus must carry out self-management properly so that the risk of complications can be reduced.

Self-management in patients with diabetes mellitus is influenced by various factors, one of which is self-efficacy. According to several studies, individuals with good self-efficacy have a positive impact on self-management behavior. Thus, regarding self-confidence or self-efficacy in self-management needs to be implemented. According to Albert Bandura's theory, self-efficacy is an individual's belief in his or her own ability to do something and organize certain tasks to get something that is expected. Self-efficacy is self-motivating, thinking, feeling confident about something, and behaving in achieving something you want (Banna, 2017).

In determining the level of self-confidence or self-efficacy of the patient, this is done as the main step to determine the next step in providing nursing care to diabetic patients. The self-efficacy assessment of diabetic patients is expected to provide an overview of the self-efficacy abilities possessed by diabetic patients. Thus, in order to find the right treatment for diabetic patients.

To improve the quality of life for people with DM, it is necessary to carry out continuous care. There are six factors that influence to improve the quality of life of DM sufferers, namely increasing knowledge, awareness, social support, behavior change, Self Efficacy and Self Management. Of the several factors that have been mentioned, it has a very positive impact on DM patients if the patient has a desire to recover. In treating their disease, DM patients have a significant role in the changes in themselves. (Son, 2018)

Self-efficacy or self-confidence in a good individual is one of the abilities that can control oneself in every face of existing threats, so that individuals have fewer problems making it easier for the individual to recover. Self-confidence is one of the elements that can improve self-care behavior in each type 2 diabetes mellitus. , monitoring, blood sugar etc.(Bahri, 2017)

The role of doctors, nurses, nutritionists or health workers in the management of DM disease has an important role, as do nurses who have a role as educators in providing information, education, and providing health services (knowledge about disease, prevention, complications, treatment, and management of diabetes). In addition, nurses are able to increase self-efficacy or patient self-confidence in the ability to complete something that is needed to achieve certain results, because this self-confidence or efficacy is able to encourage self-processes in controlling, maintaining the behavior needed in the management of self-care and therapy. diabetes mellitus.(Mia Widha Anindita, 2019).

## RESEARCH METHODS

This research is correlational quantitative analysis, that is, this research explains a relationship, estimates, and tests based on existing theories. The research location is in the Work

Area of the Saronggi Health Center. The population of this study is all type II DM patients in the region, working at the Saronggi Health Center as many as 259 people in 2020. The sample is some of the DM patients who live in the working area of the Saronggi Health Center as many as 72 respondents. The sampling technique in this research is simple random sampling. Collecting data using documentation techniques and interviews using questionnaires. Data were analyzed using Spearman's Test.

## RESULTS AND DISCUSSION

### General Data

The respondents of this study were 72 respondents. The distribution of the characteristics of research respondents by gender, level of education and occupation can be seen in Table 1.

Table 1. Respondent Characteristic Distribution

Respondent Characteristic	N	%
<b>Gender</b>		
Male	19	26.4
Female	53	73.6
<b>Education Level</b>		
Uneducated	9	12,5
Elementary	39	54,2
Junior High School	18	25,0
Senior High School	6	8,3
<b>Pekerjaan</b>		
Housewife	22	30,6
Entrepreneur	13	18,1
Seller	2	2,8
Farmer	35	48,6

Table 2. Distribution of the frequency of self-confidence / Self Efficacy owned by type II DM patients in the Work Area, Saronggi Health Center

Self Efficacy	f	%
Good	42	58.3
Moderate	26	36.1
Lack	4	5.6
<b>Total</b>	<b>72</b>	<b>100.0</b>

Based on table 2, it shows that most of the self efficacy of respondents have good self efficacy as many as 45 respondents (58.3%).

### Self Management of diabetes patients

Table 3 Frequency distribution of Self Management owned by type II DM patients in the Saronggi Health Center Work Area

Self Management	F	%
Good	63	87.5

Moderate	9	12.5
Total	72	100.0

Based on 'table, 3,.. shows' that 'almost, entirely' self,. management on respondents, almost entirely. is good as many as 63 respondents (80.5%).

Relationship self efficacy with self management on type II DM patients in the Work Area of the Saronggi Health Center

Table 4. Crosstabulation of the relationship between self-efficacy and self-management in type II DM patients in the work area of the Saronggi Public Health Center

Self Efficacy	Self Management				Total	
	Good		Moderate		N	%
	N	%	N	%		
Good	40	95,2	2	4,8	42	100
Moderate	20	76,9	6	23,1	26	100
Lack	3	75,0	1	25,0	4	100
Total	63	87,5	9	12,5	72	100

Rank Spearman ; (P=0,020)

Note\*= signifikan (p value<0,05)

Based on table 2. Data from 72 respondents showed that the level of self-efficacy of respondents was good as many as 42 respondents, with good self-management as many as 40 (95.2%) and sufficient self-management as many as 2 (4.8%). There are 26 respondents with sufficient self-efficacy data, with good self-management as many as 20 (76.9%) and enough self-management as many as 6 (23.1%). And a total of 4 respondents lacking self-efficacy, with good self-management as many as 3 (75.0%) and enough self-management as much as 1 (25.0%). It is known from the results of the Spearman rank correlation statistical test that p value = 0.020, which means, there is, a significant relationship between self-efficacy, with, self, management, in patients, diabetes mellitus, type, II in the work area, Puskesmas, Saronggi.

## Discussion

Based on the results of the study, data showed that the self-efficacy of respondents in type II DM patients in the Work Area, Saronggi Health Center mostly had good self-efficacy.

Self-efficacy or self-confidence in a good individual is one of the abilities that can control oneself in every face of existing threats, so that individuals have fewer problems making it easier for the individual to recover. Self-confidence or self-efficacy affects a person's behavior towards adherence to treatment regimens (Manuntung, 2017)

Based on research conducted by (Handono, 2017) with his research on the relationship between self-efficacy and compliance with the quality of life of diabetes mellitus patients with a sample of 125, it shows that the level of self-efficacy/confidence of respondents is almost entirely good, 83%.

The results showed that self-confidence or self-efficacy is one of the factors that can control a person's behavior in dealing with a threat or a disease that is being suffered, especially in type II diabetes mellitus patients. This is something that needs to be considered by health workers to try to increase self-efficacy which is an independent nursing action.

Based on the results of the study, data showed that the self-management of respondents with type II DM patients in the, Region, Working Health Center, Saronggi almost all had good self-management. Management of patients with type II diabetes mellitus is to prevent and slow down complications that arise by performing good self-management behavior in the patient's life, for

example diet, good physical activity, monitoring blood sugar and using health services (Kallo, 2019).

Based on research conducted by (Zuqni, 2017) with his research related to self-management with blood glucose while in type 2 DM patients with a sample of 130, the results of the study found that 72.31% of DM patients had sufficient self-management and blood glucose when the patient did not controlled. The results of the p-value of 0.0001 ( $p < 0.05$ ) showed that there was a relationship between self-management and temporary blood glucose. Thus the importance of increasing knowledge about self-management in patients such as physical activity, diet, blood sugar control on a regular basis.

The results of this study indicate that the importance of self-management, especially in patients with diabetes mellitus, in an effort to prevent an increase in blood sugar and prevent complications that can occur if not managed properly.

Based on the results of research on the relationship between self-efficacy and self-management in type II DM patients in the work area of the Puskesmas, there is a significant relationship between self-efficacy and self-management in type II DM patients in the work area of the Saronggi Health Center.

According to several studies, individuals with good self-efficacy have a positive impact on self-management behavior. On the other hand, the lower a person's self-efficacy, the lower self-management in patients with diabetes mellitus (Banna, 2017).

Based on research conducted by Mario (2019), regarding, the relationship, motivation, and self-efficacy in type 2 DM patients at the GMIM public hospital, Pancaran Kasih Manado. The results of the study showed that most of the respondents had good self-efficacy with a total of 22 respondents (64.7%), while respondents who had poor self-efficacy were 12 respondents (35.3%). The results of this study indicate that most of the respondents have good self-efficacy, which is 64.7%. The researcher assumes that a good respondent's self-efficacy is able to improve his ability to manage himself well

The results of this study indicate that someone with DM has good self-efficacy, is able to have a positive impact on improving self-management in patients with diabetes mellitus in an effort to prevent complications that can occur in DM patients.

## CONCLUSION

There is a relationship between self-efficacy and self-management in type II DM patients in the work area of the Saronggi Public Health Center.

### Suggestion

- 1) For related parties, especially puskesmas, provide assistance that is to increase patient self-efficacy to support improved self-management that is carried out properly
- 2) Respondents can increase self-efficacy so that self-management becomes good.

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