



## Family Support And The Emotional Response Of Diabetes Mellitus Patients In The Internal Medicine Specialist Clinic At Delta Surya Hospital, Sidoarjo

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### Abstract

Diabetes mellitus has psychological impacts such as stress or anxiety, so that they need their families' supports to make the patients' emotional responses good. The objective of this research was to know the relationship between the families' supports and the diabetes mellitus patients' emotional responses in Internal Diseases Clinics Chamber of Delta Surya Sidoarjo Hospital Sidoarjo City. The design of this research was correlational analytics with a cross-sectional approach. The population was 304 diabetes mellitus patients, and 61 respondents were taken as samples by accidental sampling technique. The independent variable was the families' supports and the dependent one was the diabetes mellitus patients' emotional responses. The independent and dependent variable data were obtained from questionnaires, and analyzed with Spearman Rank Test with Mean value  $p < 0.05$ . The research results were 33 respondents (54.1%) had good families' supports, and 37 respondents (60.7%) had good emotional responses. There was a relationship between the families' supports and the diabetes mellitus patients' emotional responses (Spearman Rank,  $p$  value =  $0.000 < \alpha 0.05$ ). The relation level was high and positive (Correlation Coefficient: 0.610). The conclusion was there was a relationship between the families' supports and the diabetes mellitus patients' emotional responses, where the better the families' supports the better the patients' emotional responses. The research recommends that family members maintain and continue to give full support to patients.

**Keywords :** Family Support, Emotional Response, Diabetes Mellitus

### INTRODUCTION

Diabetes mellitus (DM) is a dangerous disease that often occurs and is a major health problem. This disease occurs over a long period of time, due to abnormalities in insulin secretion, insulin action, or both (Perkeni, 2014). This disease will last a lifetime and cannot be cured, so it is hoped that Diabetes Mellitus patients can be prevented or cured by controlling the condition of unstable blood glucose levels which can cause more severe complications (Kusniyah & Urip, 2011).

Not only physical problems, however, they can also affect the psychological, social and economic conditions of the sufferer. The psychological impact in the form of stress and anxiety regarding Diabetes Mellitus is not only felt by Diabetes Mellitus patients, but their families also feel the disruption in social interactions and interpersonal relationships caused by the feeling of hopelessness felt by the sufferer. Those who have experienced complications of diabetes mellitus

such as nephropathy and diabetic ulcers will need a long period of treatment so that they require quite a lot of money to treat. Prince & Wilson 2007. In people with diabetes there are several emotions, this emotional aspect includes obsessive denial, anger, fear, will cause mistakes, disappointment and the feeling that it has limited all aspects of life. The emotional aspect must be maintained so that blood sugar levels do not increase (Hidayati, 2009).

The number of diabetes cases has increased in the last ten years and is the sixth cause of death worldwide. The increase in diabetes cases will have an impact on decreasing life expectancy, increasing morbidity rates and reducing quality of life. (Nwanko et al, 2010). Diabetes mellitus is a type of diabetes that occurs more frequently in 90 -95% of all people suffering from diabetes (Perkeni, 2010) The main problem faced by Diabetes Mellitus is an increase in blood sugar levels which triggers heart disease, kidney problems caused by sufferers

suffering from diabetes for a long time (Sousa, et al., 2009)

According to WHO (*World Health Organization*) Indonesia is a ranking country 4th most amount sufferers of diabetes mellitus after the US, India, and China (Perkeni, 2014). According to estimates by the International Diabetes Federation (IDF), there are 81 million people with Diabetes Mellitus in Southeast Asian countries. This number is expected to increase from 7.0% in the 20-79 year age group in 2010 to 8.4% in 2030 (WHO, 2014). WHO predicts an increase in the number of people with Diabetes Mellitus in Indonesia from 8.4 million in 2000 to around 21.3 million in 2030. IDF estimates that there will be an increase in the number of people with Diabetes Mellitus from 7.0 million in 2009 to 12.0 million in 2030. Data from WHO and IDF shows differences in prevalence rates. However, both reports show an increase in the number of people with Diabetes Mellitus by 2-3 times by 2030 (Ministry of Health, 2014). According to the 2013 East Java Province Health Profile data, Diabetes Mellitus is a non-communicable disease which is included in the 10 diseases of inpatients, the second most common in East Java after hypertension (Dinkes, 2014).

According to Suyono (2009) the prevalence of Diabetes Mellitus in East Java Province is 1.43%–1.47%. With a population of around 38,052,950 people in East Java Province, it is estimated that the number of Diabetes Mellitus patients in East Java is 544,157–559,378 people. Meanwhile, in the city of Surabaya, the incidence of diabetes mellitus was 50.9%, in Sidoarjo it was 68% and a preliminary study conducted by researchers at Delta Surya Hospital, Sidoarjo, obtained data from medical records from January 2020–October 2020, totaling 304 Diabetes Mellitus patient visits. The results of interviews with 10 patients who visited the internal medicine clinic at Delta Surya Hospital Sidoarjo interviewed 8 patients (80%) with Diabetes Mellitus and their families, that the patient felt that family support was very important because without family support he would not be able to treat his own disease, and the family said that always provide support to patients and always accept the patient's condition sincerely. Another 2 people (20%) said there were problems with the family such as children hard to set and the increasing number of family needs and feel that their income is insufficient to meet their needs, so they find it difficult to avoid these problems and often find it difficult to control their emotions, are easily angry and offended, and feel their heart pounding, have difficulty sleeping and often wake up in the middle Evening.

Family support is support in the form of information, certain things or material that can make individuals feel loved, cared for and loved

(Ali, 2009). where family members are involved in many aspects of health care activities required by diabetes patients. The absence of support from the family results in lack of compliance with diabetes treatment and poor glycemic control (Chung, 2013). Other problems of diabetes mellitus sufferers are psychological problems, namely psychological burden (stress), negative emotional responses, anxiety, depression, Social problems can arise in diabetes mellitus patients in the form of a lack of social interaction and also interpersonal relationships due to despair. (Price & Wilson, 2007).

Complications that occur in Diabetes Mellitus have an impact on quality of life, high health care costs and morbidity and are the main cause of death (Goh, Rusli, & Khalid, 2015). Prevention efforts to treat diabetes mellitus (DM) according to Lanywati (2011) include undergoing primary therapy consisting of a diabetes mellitus diet, physical exercise (exercise and health education), using anti-diabetic drugs and a pancreas transplant if blood sugar levels remain high. Meanwhile, according to Ramaiah (2008), it consists of a program of insulin injections, diet, exercise, medication, relaxation, and water and mud therapy to improve pancreatic function in the legs and eliminate toxins. Based on the background of the phenomenon described above, researchers are interested in conducting research on "The Relationship Between Family Support and the Emotional Response of Diabetes Mellitus Patients at the Internal Medicine Clinic at Delta Surya Hospital, Sidoarjo".

## METHODS

This research uses a correlational analytical design approach *cross sectional*, namely a research technique to study the dynamics of the correlation between risk factors and effects, by approaching, observing or collecting data at one time. This means that the research subject is only observed once and measurements are made on the character status or variables of the research subject at the time of the examination (Notoadmodjo, 2010). The population in this study was all Diabetes Mellitus patients in the disease specialist clinic at Delta Surya Hospital, Sidoarjo, totaling 304 patients. Meanwhile, the sample for this study was a portion of Diabetes Mellitus patients who experienced family support in the specialist internal medicine ward at Delta Surya Hospital Sidoarjo. The inclusion criteria were Diabetes Mellitus patients who were willing to be respondents and would be researched at the specialist internal medicine ward at Delta Surya Hospital Sidoarjo. The minimum sample size in this study was 20% of the total population, namely 61 patients. The variables used are family support as an independent variable (independent variable), and

emotional response as a dependent variable (dependent variable).

This research uses an instrument in the form of a questionnaire. Form a questionnaire to determine family support and emotional response using a Likert scale. The type of data source used in this research is primary data, through a data collection process by distributing and filling out questionnaires whose validity and reliability have previously been tested. Next, all questionnaire data is processed by editing, coding, scoring and tabulating. After obtaining data from respondents, the data was processed using SPSS so that it was obtained from the data that in this research there was a relationship between the independent variable and the dependent variable.

## RESULTS AND DISCUSSION

The following is a description of the results of research carried out at the Internal Medicine Specialist Clinic at Delta Surya Hospital, Sidoarjo regarding the Relationship Between Family Support and the Emotional Response of Diabetes Mellitus Patients:

**Table 1 . Frequency Distribution of Respondents Based on Age at the Internal Medicine Specialist Clinic at Delta Surya Hospital Sidoarjo 2021**

No	Respondent's Age	Frequency	%
1	< 45 years	0	0 %
2	45-59 years old	21	34.4 %
2	60-74 years old	28	45.9 %
3	75-90 years old	12	19.7 %
<b>Gender</b>			
1	Man	28	45.9 %
2	Woman	33	54.1 %
<b>Level of education</b>			
1.	Elementary School	10	16.4 %
2.	Junior High School	11	18.0 %
3.	High School	14	23.0 %
4.	Bachelor	26	42.6 %
<b>Total</b>		<b>61</b>	<b>100.0 %</b>

Based on table 1 above shows that almost half of the respondents were aged 60-74 years, namely 28 respondents (45.9%) out of a total of 61 respondents. Shows that the majority of respondents were female, namely 33 respondents (54.1%) out of a total of 61 respondents. And shows that almost half of the respondents attended undergraduate studies, namely 26 respondents (42.6%) out of a total of 61 respondents.

**Table 2 . Frequency Distribution of Respondents Based on Family Support with Diabetes Mellitus Patients at the Internal Medicine Specialist Clinic at Delta Surya Hospital Sidoarjo 2021**

No	Family support	Frequency	%
1	Good	33	54.1 %
2	Enough	19	31.1 %
3	Not enough	9	14.8 %
<b>Total</b>		<b>61</b>	<b>100.0 %</b>

Based on table 2 above, it shows that the majority of family support is good, 33 respondents (54.1%).

**Table 3. Frequency Distribution and Respondents Based on Emotional Responses with Diabetes Mellitus Patients from Internal Medicine Specialist Clinic at Delta Surya Hospital Sidoarjo 2021**

No	Emotional Response	Frequency	%
1	Good	37	60.7 %
2	Enough	14	23.0 %
3	Not enough	10	16.4 %
<b>Total</b>		<b>61</b>	<b>100.0 %</b>

Based on table 3 above, it shows that the majority who experienced an emotional response to the patient were good, 37 respondents (60.7%)

**Table 4. Cross Tabulation of Family Support with Emotional Responses of Diabetes Mellitus Patients from Internal Medicine Specialist Clinic at Delta Surya Hospital Sidoarjo 2021**

Emotional Response	Family support					
	Good	%	Enough	%	Not enough	Amount
Good	33	100 %	4	21 %	0	0 % 37
Enough	0	0 %	14	74 %	0	0 % 14
Not enough	0	0 %	1	5 %	9	100 % 10
<b>Amount</b>	<b>33</b>		<b>19</b>		<b>9</b>	<b>61</b>

Based on table 4 above, it shows that all patients in families with good support had a good emotional response (100%), most patients in families with sufficient support had a sufficient emotional response (74%), all patients in families with poor support had a response. less emotional (100%).

**Table 5 . Results of Spearman Rank Correlation Analysis of Family Support with Emotional Responses of Diabetes Mellitus Patients**

Variable	Correlation Coefficient	p
Emotional Support-Response N = 61 $\alpha = 0.05$	0.610	0,000

Based on table 6 above, it shows that there is a relationship between family support and the emotional response of diabetes mellitus patients at the internal medicine specialist clinic at Delta Surya Hospital, Sidoarjo 2021 ( *Spearman* ,  $p = \text{value } 0.000 < 0.05$  then  $H_0$  is rejected). *Correlation Coefficient* (r) of 0.610 indicates a positive correlation with high correlation strength. A positive correlation value shows that the greater the value of a variable, the greater the value of other variables. Regarding the relationship between family support and the patient's emotional response, a positive value means that the better the patient's family support, the better the emotional response experienced by the patient.

#### a. Family Support with Diabetes Mellitus Patients

Based on the research results in table 4, it was found that most of the respondents' family support for Diabetes Mellitus patients at the Internal Medicine Specialist Clinic at Delta Surya Hospital Sidoarjo was in the good category, namely, 33 respondents (54.1%). According to L anddy and Conte (2007) support is comfort, assistance, or information received by someone through formal or informal contact with individuals. Social support can come from various environments, one of which is family, such as support from husband, wife, children, grandchildren, siblings (Achy, 2009). According to Purnawan (2008) factors that influencing family support, namely, internal factors, stage of development, education or level of knowledge, spiritual, external factors, socio-economic and background.

Most respondents have good family support because the family is the smallest social group in society that pays attention to and cares about the health conditions of other family members, the family provides emotional comfort when stress occurs, provides security and support, helps other family members in their development stages, The family knows the problems or illnesses that usually occur in the patient, the family knows the cause of the patient's illness, the family recognizes the symptoms that occur when the patient experiences problems or is sick and the family considers patient care to be important. So the family provides support to the patient in the internal medicine clinic room, such as transporting the patient, accompanying the patient during health

checks, reminding the patient when the control schedule is carried out.

#### b. Emotional Responses with Diabetes Mellitus Patients

Based on table 3, it was found that the majority of respondents had an emotional response to Diabetes Mellitus patients at the Internal Medicine Specialist Clinic at Delta Surya Hospital, Sidoarjo, including 37 respondents (60.7%) in the good category . Santrock (2007) emotional response is a feeling or desire within oneself that involves physical arousal and actual behavior. Emotions are an interpretation of an event. The emotional process begins when a person gives a personal characteristic to an event. The same situation will not necessarily produce the same emotions because it depends on a person's nature regarding the situation (Mendatu, 2007) . There are factors that influence the emotional response of diabetes mellitus patients, namely internal factors, physical aspect, psychological aspect. F external actors stimulus itself, saturation, environmental stimulus.

Most of the respondents had a good emotional response caused. because family always provides love, attention, security and warmth. They feel calmer after a health check is carried out by a health worker, such as checking blood pressure, checking blood sugar levels. When the results are good, the patient feels calm, because the body's health condition is good and there is nothing to worry about, but if the test results are not good, then the patient will immediately receive further treatment so that their health condition is maintained and serious complications do not occur. Apart from that, patients feel comforted by coming to the internal medicine clinic room because they can meet other patients and can reduce the level of boredom and stress experienced by patients when at home alone while his family members are busy with their other activities.

#### c. The Relationship Between Family Support and the Emotional Response of Diabetes Mellitus Patients

Based on table 5 above, it is known that there is a relationship between family support and the emotional response of Diabetes Mellitus patients at the Internal Medicine Specialist Clinic at Delta Surya Hospital, Sidoarjo ( *Spearman* ,  $p \text{ value } 0.000 < 0.05$ , so  $H_0$  is rejected). The strength of the relationship is included in the high category ( *Corelation Coefficient* : 0.610), so the better the support provided by the family, the better the emotional response of the Diabetes Mellitus patient and good family support will produce a good emotional response.

Family support is help or support that individuals receive from certain people in their lives so that someone who receives support will feel cared for, appreciated and loved. Providing meaningful support can increase family adaptation (Suhita, 2007). The meaning of an emotional response is a feeling or desire within oneself that involves physical arousal and real behavior (Santrock, 2007). There are several factors that influence the emotional response of Diabetes Mellitus patients, namely internal factors, physical aspects, psychological aspects, external factors, the stimulus itself, boredom, environmental stimuli. Patients who receive support from their partners, children, grandchildren, or from family who are considered important will generate a response. emotional to behave. This is an external factor that comes from outside the individual, the presence of a high emotional response will increase the patient's desire to visit a health service or the Internal Medicine Clinic room so that their health status can be properly monitored.

This is because the family is the smallest social group in society that pays attention to each other and cares about the health conditions of other family members. always provide love, attention, security and warmth. They feel calmer after knowing that their body's health condition is good and there is nothing to worry about. Apart from this, a good emotional response to having their illness checked at the Internal Medicine Clinic room is also strengthened by the support of family members, such as family who provide informational support. explained the benefits of having a health check-up at the Internal Medicine Polyclinic room and emotional support, namely that the family always provides love, attention, a sense of security, warmth to other family members.

## CONCLUSION

Based on the results of research, analysis and discussion regarding "The Relationship between Family Support and the Emotional Response of Diabetes Mellitus Patients in the Internal Medicine Specialist Clinic Room at the Hospital. Delta Surya Sidoarjo can be concluded as follows: Most of the Diabetes Mellitus patients (54.1%) were in the Internal Medicine Clinic ward at the hospital. Delta Surya Sidoarjo has good family support who comes to the Internal Medicine Clinic room at the hospital. Sidoarjo Solar Delta. Most of the Diabetes Mellitus patients (60.7%) were in the Internal Medicine Poly ward at the hospital. Delta Surya Sidoarjo had a good emotional response when they came to the internal medicine clinic room. There is a relationship between family support and the emotional response of Diabetes Mellitus patients in the Internal Medicine Specialist Clinic Room at the Hospital.

Delta Surya Sidoarjo with high correlation strength, namely 0.610.

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