

THE RELATIONSHIP BETWEEN FAMILY SUPPORT AND ANXIETY IN DIABETES MELLITUS AT RSUD DR. HARJONO PONOROGO IN 2023

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ABSTRAK

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Abstract:

The prevalence of Diabetes Mellitus (DM) globally continues to increase until it triples in 2030, namely 21.3 million (Perkeni, 2019). Physical, psychological, economic and social changes occur due to various complications. Diabetes mellitus, which cannot be completely cured, often results in anxiety and decreases quality of life. The role of patients and families in managing DM is vital because DM is a chronic disease that patients will carry for life (Perkeni, 2019). The research aims to identify family support and the level of anxiety among patients with type 2 diabetes mellitus at the Internal Medicine Clinic, Dr. RSUD. Harjono Ponorogo. This research design used cross-sectional research with the Zung Self-Rating Anxiety Scale and Hensarling's Diabetes Family Support Scale). Data analysis used statistical tests with Spearman's Rink through the SPSS program with α of 5%. The results of the Spearman Rink test obtained a value (p -value = 0.027 < 0.05) indicating that there is a significant relationship between family support and anxiety in patients with diabetes mellitus. Based on the results of the analysis, it is known that family support has a significant influence on the level of anxiety among patients with type 2 diabetes mellitus.

Abstrak:

Prevalensi Diabetes Mellitus secara global terus meningkat hingga menjadi tiga kali lipat pada tahun 2030 yaitu 21,3 juta (Perkeni, 2019). Perubahan fisik, psikologis, ekonomi maupun sosial merupakan perubahan yang terjadi akibat dari berbagai komplikasi. Penyakit diabetes mellitus yang tidak bisa disembuhkan secara total sering berdampak pada terjadinya kecemasan dan penurunan kualitas hidup. Peran pasien dan keluarga dalam pengelolaan penyakit DM sangat penting karena penyakit DM merupakan penyakit menahun yang akan diderita pasien seumur hidup (Perkeni, 2019). Penelitian yang akan dilakukan ini bertujuan untuk mengidentifikasi dukungan keluarga dengan tingkat kecemasan pasien DM di Poli Penyakit Dalam RSUD dr. Harjono Ponorogo. Rancangan penelitian ini dengan menggunakan penelitian cross sectional dengan alat ukur Zung Self-Rating Anxiety Scale dan The Hensarling's Diabetes Family Support Scale). Analisa data menggunakan uji statistik dengan spearmant rink melalui program SPSS dengan α sebesar 5%. Hasil Uji Spearmant rink diperoleh nilai (p -value = 0,027 < 0,05) menunjukkan bahwa ada hubungan yang signifikan antara dukungan keluarga dengan kecemasan pada Penderita DM. Berdasarkan hasil analisis diketahui bahwa dukungan keluarga memiliki pengaruh secara signifikan terhadap tingkat kecemasan penderita DM tipe 2.



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INTRODUCTION

The International Diabetes Federation (IDF) estimates that 463 million people aged 20-79 years in the world suffer from diabetes in 2019. The number of diabetes sufferers in the world is predicted to increase to 20.4% in 2030 and 20.5% in 2045. Indonesia is in the 1st rank 7th among 10 countries with the highest number of sufferers, namely 10.7 million [1]. The number of diabetes mellitus sufferers in East Java according to the all age category in 2020 is 875,745 people. Meanwhile, diabetes mellitus sufferers in the Ponorogo Regency area in 2020 were recorded at 15,396 people [2].

Anxiety is an individual's subjective condition and experience of an unclear and specific object due to anticipation of danger which allows the individual to take action to face the threat. Anxiety is worry due to a perceived threat to health. The anxiety response can have a normal psychological impact on humans who experience stressors. Stressors that cause an anxiety response include the threat of death. The threat of death which causes anxiety in humans is caused by illness, especially chronic diseases, one of which is Diabetes Mellitus. Physical, psychological, economic and social changes are changes that occur as a result of various complications that accompany Diabetes Mellitus [3].

Indonesia is ranked 7th among the 10 countries with the highest number of sufferers, namely 10.7 million and is the only country in Southeast Asia on the list, so it can be estimated that Indonesia's contribution to the prevalence of diabetes cases in Southeast Asia [4].

Research conducted by the Batam City Health Center shows fact that Diabetes Mellitus patients experience anxiety in various categories, namely mild anxiety 53%, moderate 24.2% and severe 22.7% [5].

Anxiety in Diabetes Mellitus sufferers, if not handled properly, will cause its problems which will make it more

difficult to manage Diabetes Mellitus. If someone is diagnosed with Diabetes Mellitus, it can cause a long-term psychological burden on him and his family. Poor psychological functioning can cause suffering that seriously affects daily Diabetes Mellitus management and is associated with poor medical outcomes and high costs. This can later complicate the process of managing Diabetes Mellitus sufferers [3].

Physiological reactions to anxiety affect the hypothalamic and pituitary axes, so that they can affect endocrine function, such as increasing cortisol levels which have an impact on insulin function and can have a negative influence on blood glucose control [5].

The role of patients and families in managing Diabetes Mellitus is vital because Diabetes Mellitus is a chronic disease that patients will suffer from for life. The need for family support to reduce anxiety in DM patients so that complications due to DM can be minimized and blood sugar levels can be controlled [6].

Based on the above background, researchers were interested in researching the relationship between family support and anxiety in diabetes mellitus patients at the internal medicine clinic at Dr. Harjono Ponorogo.

RESEARCH METHOD

The design of this research is correlation using cross-sectional, which is a type of research that emphasizes measuring and observing independent and dependent variable data only once at a time, namely when the patient visits the Internal Medicine Polyclinic at Dr. RSUD. Harjono Ponorogo [7]. The population in this study were Diabetes Mellitus type 2 patients who came to the Internal Medicine Clinic, RSUD dr. Harjono Ponorogo with a simple number of 80 respondents. The independent variable in this study is family support for Diabetes Mellitus patients at the Internal Medicine Polyclinic at RSUD dr. Harjono

Ponorogo and the dependent variable in this study is the anxiety of Diabetes Mellitus patients at the Internal Medicine Polyclinic at RSUD dr. Harjono Ponorogo.

Data analysis uses statistical tests with Spearman's Rink with α of 5% (0.05). If the p -value $\leq \alpha$ (0.05), then H_0 is rejected and H_a is accepted so that there is a relationship between family support and the anxiety level of Diabetes Mellitus patients. If the p -value $> \alpha$ (0.05), then H_0 is accepted and H_a is rejected so there is no support relationship families with the level of anxiety of Diabetes Mellitus patients at the Inner Poly Hospital of Dr. Harjono Ponorogo.

RESULTS AND ANALYSIS

Respondent Characteristics

Table 1.
Respondent Characteristic

Characteristic	Frekwensi (%)
Age	
21-30	2 (2)
31-40	5 (6)
41-50	13 (16)
51-60	34 (43)
> 60	26 (33)
Total	80 (100)
Gender	
Man	23 (34)
Woman	57 (66)
Total	80 (100)
Education level	
No school	4 (5)
Elementary school	25 (31)
Junior high school	13 (16)
Senior high school	21 (26)
College	17 (21)
Total	80 (100)
Occupation	
PNS/TNI/Polri	18 (22,5)
Farmer	7 (8,8)
House wife	24 (30)
Private	17 (21,3)
Laborer	4 (5)
No occupation	10 (12,5)
Total	80 (100)

Based on table 1, it can be seen that the majority of respondents were age 51-60 years 43%, female 66%, elementary school education 31% and housewives 30%.

Duration of suffering Diabetes Mellitus

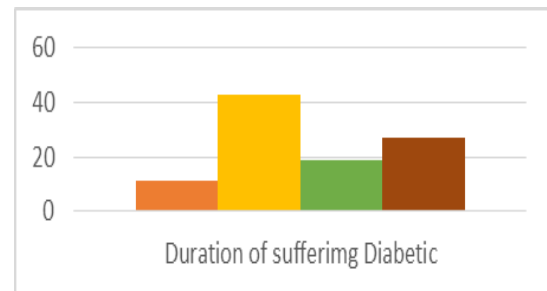


Diagram 1: Duration of suffering from Diabetic

Duration of suffering Diabetic of respondents, research results show the relationship between family support and the level of anxiety of diabetes mellitus patients in the internal medicine clinic at Dr. Harjono Ponorogo In 2023 it is known that of the 80 respondents, less than 1 year 9 respondents, 1-5 years 34 respondents, 6-10 years 15 respondents and more than 10 years 22 respondents.

Duration of suffering Diabetic of respondents, research results show the relationship between family support and the level of anxiety of diabetes mellitus patients in the internal medicine clinic at Dr. Harjono Ponorogo In 2023 it is known that of the 80 respondents, less than 1 year 9 respondents, 1-5 years 34 respondents, 6-10 years 15 respondents and more than 10 years 22 respondents

Family with the patient when they go to the hospital

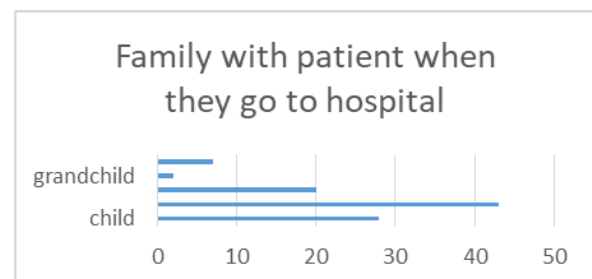


Diagram 2. Family with the patient when they go to the hospital

Based on the family and the patient when they went to the hospital, the results of research on the relationship between family support and the level of anxiety of diabetes mellitus patients in the internal medicine clinic at Dr. Hospital. Harjono Ponorogo In 2023 it is known that out of 80 respondents, 22 respondents had children, 34 respondents had husband/wife, 16 respondents had husband/wife/children, 2 respondents had grandchildren and 6 respondent siblings

BPJS Ownership

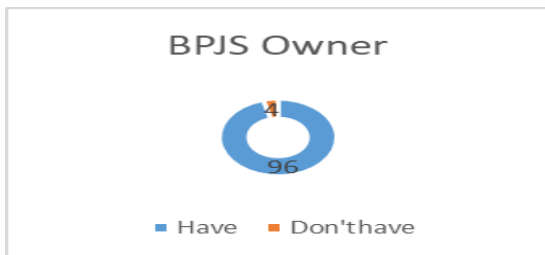


Diagram 3. BPJS Ownership

Based on the BPJS ownership of respondents, research results show the relationship between family support and the level of anxiety of diabetes mellitus patients at the internal medicine clinic at Dr. RSUD. Harjono Ponorogo In 2023 it is known that out of 80 respondents, 77 respondents have BPJS and 3 respondents do not have BPJS.

Monthly income

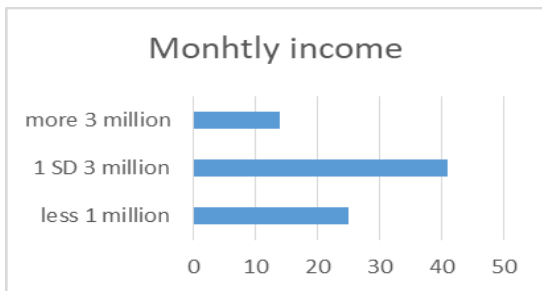


Diagram 4. Monthly income

Based on the income of respondents, research results show the relationship between family support and anxiety levels in diabetes mellitus patients at the internal medicine clinic at Dr.

Hospital. Harjono Ponorogo In 2023 it is known that of the 80 respondents, less than 1 million 25 respondents, 1-3 million 41 respondents and more than 3 million 14 respondents.

Family support

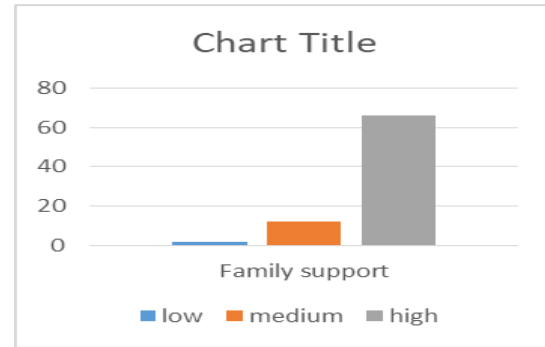


Diagram 5. Family support

Based on family support, the relationship between family support and the level of anxiety of diabetes mellitus patients in the internal medicine clinic at Dr. Hospital. Harjono Ponorogo In 2023 it was discovered that out of 80 respondents, 2 respondents had low support, 12 respondents had medium support and 66 respondents had high support

Diabetic DM patient's anxiety level

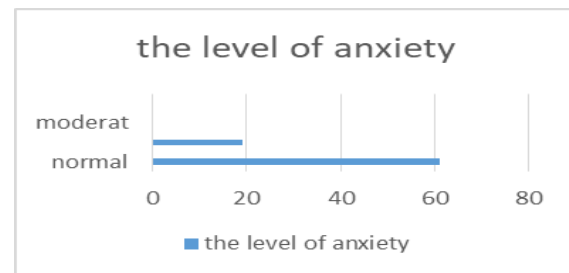


Diagram 6. Diabetic patient's anxiety level

Based on the level of anxiety of respondents, research results show the relationship between family support and the level of anxiety of diabetes mellitus patients in the internal medicine clinic at Dr. Harjono Ponorogo In 2023, it is known that out of 80 respondents, 59 respondents did not experience anxiety, 20 respondents had mild anxiety, 1 respondent had moderate anxiety and 0 respondents had severe anxiety.

Relationship Between Family Support and Anxiety Levels in Diabetic Patients

Table 2.
Relationship between family support and anxiety levels in diabetic patients

Family Support	Level of anxiety								
	Nor.	%	Mild %	mod. %	Sev. %	Tot %			
High	1	1.3	0	0	1	1.3	0	0	2
Medium	6	7.5	6	7.5	0	0	0	0	12
Low	51	63.5	15	18.7	0	0	0	0	66
Total	58	73	21	26.2	1	1.3	0	0	80

Results of research on the relationship between family support and anxiety levels in diabetes mellitus patients at the internal medicine clinic at Dr. Harjono Ponorogo In 2023, it was found that out of 80 respondents with low family support there was no anxiety, 1 respondent had low family support, moderate anxiety, 1 respondent and none (0) respondents with low support had mild and severe anxiety. Moderate family support with no anxiety 6 respondents, moderate support with mild anxiety 6 respondents and none moderate family support with moderate and severe anxiety. High family support, no anxiety, 51 respondents, high family support, mild anxiety, 15 respondents, and none (0) respondents, high family support, with moderate and severe anxiety. The results of the Spearman Rink test obtained a value (p-value = 0.027 < 0.05) indicating that there is a significant relationship between family support and anxiety in DM sufferers.

Results of research on the relationship between family support and anxiety levels in diabetes mellitus patients at the internal medicine clinic at Dr. Harjono Ponorogo In 2023, it was discovered that of the 80 respondents with high family support there was no anxiety, 51 respondents had high family support, mild anxiety, 15 respondents (0) had high family support with moderate and severe anxiety. The results of the Spearman Rink test obtained a value (p-value =

0.027 < 0.05) indicating that there is a significant relationship between family support and anxiety in DM sufferers.

DISCUSSION

Family support from research on the relationship between family support and the level of anxiety of diabetes mellitus patients in the internal medicine clinic at Dr. Hospital. Harjono Ponorogo In 2023 it was discovered that out of 80 respondents, 2 respondents had low support, 12 respondents had moderate support and 66 respondents had high support. Family support from research on the relationship between family support and the level anxiety of diabetes mellitus patients in the internal medicine clinic at Dr. Hospital. Harjono Ponorogo In 2023 it was discovered that out of 80 respondents, 2 respondents had low support, 12 respondents had moderate support and 66 respondents had high support.

The family has strategic value in health development, because every individual problem is a family problem. Family support is a form of interpersonal relationship that includes attitudes, actions and acceptance of family members, in the form of informational support, instrumental support and emotional support [5]. Family support can be in the form of internal social support, such as support from husband, wife or support from siblings and can also be in the form of external family support for the nuclear family. This improves family health and adaptation [8].

Family support is an attitude, an act of family acceptance towards a sick family member [9] Family support is also influenced by several factors. Friedman [8] said that the factors that influence family support are socio-economic class including income level, occupation and education level. In middle class family support, a relationship is more democratic and fair, while in lower middle class family support, the relationship is more authoritative and autocratic. Another factor is the level of education, the higher the level of education,

the higher the likelihood of support given to support sick families [9].

Researchers assume that family support is the most influential factor in the recovery process of patients experiencing DM. Family support is the social environment closest to the patient, it is hoped that it can speed up or reduce complications that occur in DM patients, apart from reducing anxiety so that they can control and shape good behavior.

Respondents' Anxiety Level Results of Research on the Relationship between Family Support and Anxiety Levels of Diabetes Mellitus Patients at the Internal Medicine Polyclinic at Dr. RSUD. Harjono Ponorogo In 2023, it was discovered that out of 80 respondents, 59 respondents experienced no anxiety, 20 respondents had mild anxiety, 1 respondent had moderate anxiety and 0 respondents had severe anxiety.

Anxiety is a vague feeling of discomfort or worry accompanied by an autonomic response. A feeling of fear caused by dangerous anticipation. This is a signal of alertness that warns individuals of danger and shows individuals to act in the face of threats [10]. Anxiety is related to a person's problems with cognitive problems which are characterized by feelings of unclear worry, because the object is not clear. Therefore, anxiety management is by clarifying the object and changing the cognitive mindset or thought pattern [11].

The anxiety of type 2 DM sufferers is a very complex problem which is influenced by various factors in their lives. Every DM sufferer generally experiences anxiety about everything related to their disease, for example anxiety about high blood glucose levels or anxiety about complications arising from their diabetes. DM sufferers have anxiety related to the treatment that must be undertaken and serious complications occur and must undergo diet or eating arrangements, check blood sugar levels, take medication and also exercise. Apart from that, the risk of

disease complications that sufferers can experience also causes anxiety [12]

Results of research on the relationship between family support and anxiety levels in diabetes mellitus patients at the internal medicine clinic at Dr. Harjono Ponorogo In 2023, it was found that out of 80 respondents with low family support there was no anxiety, 1 respondent had low family support, moderate anxiety, 1 respondent and none (0) respondents with low support had mild and severe anxiety. Moderate family support with no anxiety 6 respondents, moderate support with mild anxiety 6 respondents and none moderate family support with moderate and severe anxiety. High family support, no anxiety, 51 respondents, high family support, mild anxiety, 15 respondents, and none (0) respondents, high family support, with moderate and severe anxiety. The results of the Spearman Rank test obtained a value (p value = $0.027 < 0.05$) indicating that there is a significant relationship between family support and anxiety in DM sufferers.

Based on the results of the analysis, it is known that family support has a significant influence on the anxiety level of type 2 DM sufferers. Based on this research, it is known that there is a negative relationship between family social support and anxiety about DM. This indicates that the family social support variable influences anxiety about DM. The relationship between anxiety is supported by high family social support in DM sufferers, so anxiety will be low so that the healing process for type 2 DM will improve. On the other hand, low family support for type 2 DM sufferers will result in high anxiety. Some type 2 DM sufferers say that family support is very important in their lives because they feel appreciated even though they are sick. High family support fosters self-confidence in type 2 DM sufferers to have the determination to recover. So, type 2 DM sufferers who receive high levels of family social support can help reduce anxiety.

The results of this study are in accordance with the Buffering Hypothesis theory which holds that social support influences health by protecting individuals from the negative effects of stress. This protection will be effective only when the individual faces severe stressors. Family support, especially support obtained from the husband or wife of a type 2 DM sufferer, will create inner calm and feelings of joy in the wife or husband of a type 2 DM sufferer. Family support for type 2 DM sufferers can foster feelings of calm, security and comfort so that it can influence anxiety of type 2 DM sufferers.

Family support is important in helping individuals who have diabetes mellitus (DM) to overcome anxiety related to their condition. Anxiety associated with DM can arise from a variety of factors, such as feeling out of control in managing blood sugar, fear of long-term complications, or stress related to daily care. It is always important to talk openly and honestly with family members about feelings and concerns regarding DM. With strong support and mutual understanding, individuals with diabetes can more easily overcome anxiety and live healthy and happy lives [5].

CONCLUSION

Most of the respondents 82.5% (66) of respondents with high family support, this shows family concern for DM patients. Most of the respondents 73.75% (59) of respondents did not experience anxiety, this is because of good support by the sufferer's family DM and there is a significant relationship between family support and anxiety in DM sufferers, this shows that high family support causes no anxiety in DM sufferers.

Based on this research, it is concluded that family support has a significant influence on reducing the anxiety level of type 2 DM sufferers. The higher the family support, the lower the anxiety level of DM patients, so it is hoped that in the family it is necessary to

implement support for DM patients by other family members. Future research could research the forms of support that can be given to DM patients.

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