The Relationship between Family Support and the Anxiety Level of Elderly People Who Experience Diabetes Mellitus

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Abstract: Elderly patients with diabetes mellitus can have anxiety. The impact of anxiety experienced by older people includes a decrease in physical activity and quality of life. One way the patient's anxiety is influenced by family support. Survey data at the All Mider Community Health Center showed that elderly patients with diabetes from the last 6 months, January – July 2023, were 103 people. This research aims to determine the relationship between family support and the anxiety level of elderly experienced with diabetes mellitus in the working area of the health center all Mider Bandar Lampung year 2023. This research design uses a quantitative cross-sectional approach. The population in this study were elderly patients who had diabetes mellitus, with 82 samples using—the cluster Random Sampling sampling technique. The research was conducted on 1-17 December 2023 at the All Mider Community Health Center, Bandar Lampung. The research instrument was a questionnaire sheet. The analysis test uses the gamma correlation coefficient. The research results showed that 50 respondents received family support, the majority of respondents did not experience anxiety, 30 respondents (60%), and 11 respondents (22%) experienced mild anxiety. Thirty-two respondents did not receive family support, the majority of respondents experienced severe anxiety, 21 respondents (65.6%), and 5 respondents (15.6%) experienced mild anxiety. The conclusion is that there is family support with the level of anxiety of older adults who experience diabetes mellitus with a p-value of 0.000. Therefore, it is hoped that community health centers will develop health services for the community to improve the quality of services, especially in socializing the importance of family support for diabetes mellitus patients

Keywords: Anxiety, Diabetes Mellitus, Family Support

INTRODUCTION

The increase in the number of older adults will have an impact on various aspects of life, both for the elderly individuals themselves, families, communities, and the government; in the elderly, there is a physical, psychological, and social decline that occurs due to the aging process, one of which is the disease Diabetes Mellitus (1).

Diabetes mellitus (DM) is a chronic, progressive disease characterized by the body's inability to metabolize carbohydrates, fats and proteins, leading to hyperglycemia (high blood glucose levels)(2). The International Diabetes Federation (IDF) notes that 537 million adults (aged 20 - 79 years), or 1 in 10 people, live with diabetes worldwide. Diabetes also causes 6.7 million deaths, or 1 every 5 seconds. In Indonesia, it is in fifth position, with the number of people living with diabetes at 19.47 million (3).

The number of DM sufferers based on districts/cities in Lampung Province is also relatively high, namely 99,766 sufferers from 14 districts/cities; Bandar Lampung itself ranks 5th as the area with the prevalence of DM cases in Lampung Province with a DM prevalence of 0.9% (4).

Diabetes mellitus has a psychosocial burden on sufferers and their family members, so family support is beneficial psychologically for the elderly. The negative psychological response to DM in someone suffering from this disease can be in the form of denial or not wanting to admit reality, anger,



feelings of guilt, anxiety, and depression (5). The psychological changes that most frequently appear and are often experienced by the elderly are anxiety, depression, insomnia, and dementia. Mentally, older adults often experience mental disorders such as insomnia, psychosocial stress, anxiety, and behavioral disorders: aggression, agitation, and depression. If an older adult experiences mental health problems, namely anxiety, then these conditions can interfere with the elderly's daily activities (6).

The impact of anxiety experienced by older people includes a decrease in physical activity and functional status, self-perception of poor health, decreased life satisfaction and quality of life, increased loneliness, and use of services and costs. Great for service (7). Family, as the closest component and having a strong emotional connection with the elderly, is the most important source of support for them in maximizing their quality of life. For older people, especially those who do not have a life partner, having a second person, namely family, is very important to provide moral support in their life process (8).

The greater the form of family support given to sufferers, the higher their emotional stability, and vice versa. The role of the family is to help overcome various anxieties experienced by a family member who is affected by diabetes mellitus and also help the recovery process, especially as the patient is undergoing outpatient and inpatient treatment. So, all activities carried out are supervised by the family itself.

Based on an initial survey conducted by researchers on July 1-3, 2023, at the All Mider Health Center in Bandar Lampung, the number of elderly patients who experienced diabetes in the last 6 months, namely from January - July 2023, was 103 people. Based on the interviews with 10 DM patients, 2 respondents said they felt they were a burden to their families. They thought they were bothering their families with the significant costs incurred for treatment and care. 2 respondents said that the DM disease they experienced had existed since they were young. The patient felt that his family was very indifferent to the patient's illness. And 4 older adults appeared to express sadness, anxiety, and helplessness due to the disease they were suffering from. Even though two people showed a positive response, the patient accepted the condition of his illness and was very calm in undergoing treatment because his family always supported him in the treatment process.

The role of family support in supporting the patient's recovery process is very much needed. This discussion will be limited so that the content is manageable and is within the boundaries that have been determined. This research will be explained in the research discussion entitled "The Relationship between Family Support and the Anxiety Level of Elderly People Who Experience Diabetes Mellitus in the Work Area of the All Mider Health Center Bandar Lampung in 2023".

METHODS

This type of research is quantitative with a cross-sectional method to analyze family support and the level of anxiety of older adults experiencing DM at the All Mider Community Health Center in Bandar Lampung. The study population was all DM patients from January-July 2023, with 103 patients. Samples were taken using the Cluster Random Sampling technique. The sample used in this study was 82 elderly respondents with the criteria of patient age being >60 years, suffering from DM for ≥ 6 months, able to communicate well, residing in the work area of the Sangatmider Health Center in Bandar Lampung.

Interviews were carried out for data collection. Variables were analyzed using univariate and bivariate analysis. Univariate analysis determines the frequency distribution of the independent variable (family support) and the dependent variable (DM patient's anxiety level). Meanwhile, bivariate analysis using the gamma correlation coefficient test was used to determine the relationship between family



support and the anxiety level of older adults experiencing DM at the Sangatmider Bandar Lampung Community Health Center in 2023.

RESULT AND DISCUSSIONS

Family Support

Based on the analysis in Table 1, the frequency of patients receiving family support was 50 respondents (61.0%) and 32 respondents (39.0%). This shows that there is a relationship between family support and the level of anxiety of older adults who experience DM in the All Mider Bandar Lampung Community Health Center Work Area.

Table 1. Frequency distribution of respondents based on family support in the work area of the All Mider Community Health Center (n=82)

Family Support	Frekuensi (n)	Presentase (%)
Support	50	61.0
No Support	32	39.0

Usually, the family provides support, such as verbal and non-verbal information, advice, genuine assistance, or behavior in the form of family presence to provide emotional benefits to the patient (9). Apart from that, the family's economic situation also greatly influences family support. Family support is influenced, among other things, by the level of family education. The higher the level of education, the higher the support given to sick families (10).

In the results of the research analysis, it was found that the majority of respondents received support from their families because older people said they were always given motivation, paid attention to what they ate, drank, and the medicine they consumed, and the family never considered older people as a burden on the family. Apart from that, the family always cares for older people and provides the best health services. Good family knowledge to understand the importance of family involvement can be interpreted as a form of helpful social relationship involving aspects of attention, assistance, and assessment from the family to obtain the health status of sick family members. Some respondents do not receive family support because the family lives separately from the elderly and the family is busy working, so there is no special monitoring such as attention to the elderly's food and drink needs. The elderly are always taken by motorbike taxis or neighbors when they go to the health center for treatment, and there is no support for illnesses. Suffered by older people.

During the research, the active role of families in supporting the health of elderly individuals was evident. Families willingly accompanied the elderly to participate in elderly posyandu activities and assisted in answering researchers' questionnaires. This support not only increased the patients' self-confidence but also reassured them that they were not alone in their health journey, with their families providing constant attention and motivation.

Level Anxiety

Based on an analysis of respondents' anxiety levels, it was found that 39.1% (32 respondents) did not experience anxiety, and 28 respondents (34.1%) experienced severe anxiety in the work area of the All Mider Community Health Center. These data state that the highest percentage is the absence of anxiety by the patient. However, 34.1% of respondents experienced severe anxiety, most likely due to the age of entering retirement; there; manypeople felt they had lost their identity, status, self-confidence,



and financial, security. Anxiety encountered in the elderly during research, such as fear of complications from DM disease to death, older adults are anxious and afraid that the need for routine treatment will become a burden on the family because they have to spend money, energy, and time to take care of the elderly.

Table 2. Frequency distribution of respondents based on anxiety level in the work area of the All Mider Community Health Center (n=82)

Level of Anxiety	Frekuensi	Persentase (%)
No Anxiety	32	39,1
Low Anxiety	16	19.5
Middle Anxiety	6	7.3
High Anxiety	28	34.1

When the research was carried out, it was found that the anxiety experienced by patients was mainly caused by fear or anxiety about death, while patients did not experience this anxiety because the respondents had positive coping themselves that the pain they suffered could be treated, the patient did not have complications because of it. With assistance with a regular diet pattern with support from their family, 16 respondents who had mild anxiety, where respondents who had mild anxiety were able to control their anxiety because they had suffered from diabetes mellitus for quite a long time and received social support from the family and education at the health center, as well as the respondents Those with moderate anxiety were 6 respondents, where respondents who had moderate anxiety were able to control their anxiety, and had sufficient knowledge about diabetes mellitus because the All Mider Community Health Center routinely held health education about the disease, thus broadening the respondents' insight.

The Relationship between Family Support and Anxiety Levels in the Elderly

The results of statistical tests using the gamma correlation coefficient obtained a P-value = 0.000; this shows that there is family support for the level of anxiety of older adults who experience DM in the All Mider Bandar Lampung Health Center Work Area.

Tabel 3. The relationship between family support and the level of anxiety in elderly people who suffer from DMin the Work Area of the Sangatmider Community Health Center, Bandar Lampung

		Anxiety Level						Total		P-	
Family Support	No		L	Low I		Middle H		High			value
	n	%	n	%	n	%	n	%	n	%	_
Support	30	60	11	22	2	4	7	14	50	100	0.000
No Support	2	6,3	5	15,6	4	12,5	21	65,6	32	100	
Total	32	39,1	16	19,5	6	7,3	28	34,1	82	100	

Family Support is the smallest unit of society, consisting of the head of the family and several people who gather and live under one roof in interdependence (11).

Several studies explain that the support provided, especially from the closest family such as husband, wife and children, can positively impact the client, such as influencing the client's physical condition for the better. On the other hand, if the family does not provide support, the sufferer will experience increased anxiety with a higher level of anxiety. The excess experienced by the client can affect the condition of type 2 diabetes mellitus sufferers; the patient's feelings become unhappy, thus affecting the client's healing process. The presence of other people in a person's personal life is



essential. This happens because a person can't fulfill their physical and psychological needs alone. Individuals need social support, one of which comes from the family as the person closest to the individual. This phenomenon is also proven by the results of researchers' observations during the research that if the family does not provide support, it will affect the patient's anxiety and calm. If patients suffering from chronic pain such as DM feel calm and do not feel anxious, it will increase positive coping mechanisms so that the patient feels appreciated, confident and always thinks positively; on the other hand, if the patient is always anxious, worried, afraid of death, it will reduce endurance—patient's body (12, 13)

The research results also showed that 7 respondents experienced severe anxiety even though they received family support. This was due to other factors that influenced the level of anxiety, such as age as an internal factor that influenced anxiety; the age of the respondents in the research was more than 60 years, so the more a person experiences aging, the more likely they are. There will be a loss of identity, status, loss of self-confidence, and anxiety due to fear of death and financial security; the patient will feel that the family is unable to carry out the treatment. The research also found that 2 respondents did not experience anxiety even though they did not receive family support; this was because the patient always thought positively about himself, the patient had the enthusiasm to recover and had feelings of self-confidence (14, 15).

CONCLUSION

The impact of more excellent work on the incidence of cataracts at Syekh Yusuf Regional Hospital was 29.4%. This is because they consider it easy to do repetitive outdoor activities without wearing sunglasses. Melrelka only wears a jacket when she's out at home. Besides that, most of the population also use personal protective equipment such as white-colored safety glasses, which are also anti-ULV. The main protein, the aromatic amino acid, absorbs ultraviolet rays from the sun. Because ultraviolet rays from the sun can accelerate wear and tear on the eye's lens, people frequently exposed to ultraviolet rays during their daily activities increase the risk for cataracts. The effects of prolonged exposure to sunlight over a long period will cause the eye's lens to dry out; this can cause cataracts.

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Based on the research results, it can be concluded that there is a significant relationship between family support and the level of anxiety of older adults who experience DM. The support given, especially from the closest family, can have a positive impact on the client; conversely, if the family does not provide support, the sufferer will experience increased anxiety, and this can affect the condition of the DM sufferer, the patient's feelings become unhappy, thus affecting the healing process. It is hoped that with the support provided by the family, patients with diabetes will always feel that they receive attention, support, and affection from those closest to them so that they do not experience excessive anxiety and can carry out optimal treatment.

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