

## The Role Of The Family Affecting Patient Care Diabetes Mellitus

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### ABSTRACT

Diabetes mellitus is a serious chronic disease that occurs either when the pancreas does not produce enough insulin, or when the body cannot effectively use the insulin it produces. Diabetes Mellitus is a disease that can increase the threat of health and death of each individual quickly and has great challenges to achieve success in management. This study aims to identify the role of the family in treating Diabetes Mellitus. This research method uses a case study design and consists of four respondents. Data collection was carried out in the Kelurahan Duri Kepa Health Center, Kebon Jeruk District, West Jakarta on 27-31 May 2021 with instruments in the form of interview guidelines, observation guidelines, notebooks, and tools to measure blood sugar levels in patients. The results showed that the application of the intervention of the family role in 4 respondents after being given education and family support the value of the family role was in the good category of 100%. The conclusion in this study the role of the family has shown positive results that can affect the care of patients with diabetes mellitus.

**Keywords :** Diabetes mellitus; Family; Role; Maintenance

### INTRODUCTION

Diabetes mellitus is a serious chronic disease that occurs either when the pancreas does not produce enough insulin, or when the body cannot effectively use the insulin it produces. Diabetes is an important public health problem, one of the four priority non-communicable diseases (NCDs) targeted for follow-up. Both the number of cases and the prevalence of diabetes have continued to increase over the last few decades. (World Health Organization 2016). The World Health Organization (2021) suggests that diabetes mellitus globally is ranked as the third largest contributor to health losses and is the top in every country in this world.

Diabetes is the direct cause of 1.5 million deaths in the world. In 2000 and 2016 there was a 5% increase in premature death from diabetes. Globally, the high mortality rate due to non-communicable diseases such as diabetes between the ages of 30 and 70 years was 18% in 2000 and 2016. In Indonesia, the diabetes mellitus rate occupies the seventh of the highest percentage population in the world after China, India, the United

States, Pakistan, Brazil, Mexico and Indonesia 10.7 million, a low percentage compared to the six countries in the world, but the number who suffer from diabetes mellitus is quite large. The Indonesian Ministry of Health (2019) stated that although risk factors are often associated with lifestyle, the number of deaths from cardiovascular disease and diabetes tends to occur more in developing countries compared to developed countries, especially in the ASEAN region, Indonesia ranks fourth with the number of adult diabetics. age > 18 years as many as 700 thousand. The country with the highest number of people with diabetes is Cambodia with 819 thousand and the country with the lowest number of diabetics is Singapore with 280 thousand.

*Prevalence* Diabetes Mellitus (DM) in Indonesia based on a doctor's diagnosis in the population aged 15 years increased from 1.5% in 2013 to 2.0% in 2018. The province with the highest prevalence was DKI Jakarta with a prevalence of 3.4% and with the lowest prevalence, namely East Nusa Tenggara with a prevalence of 0.9%. (Ministry of Health RI 2018). Diabetes Mellitus has several distinctive signs and symptoms. The typical symptoms of Diabetes Mellitus are often called trispoli which consist of excessive thirst (polydipsia), frequent urination (polyuria), especially at night, often feeling hungry (polyphagia). Other signs and symptoms that are often experienced by Diabetes Mellitus patients are rapid weight loss, complaints of weakness, tingling in the hands and feet, blurred vision, impotence, wounds that are difficult to heal, vaginal discharge, and itching (pruritus). (Damayanti 2020).

Efforts made by the government in preventing and controlling diabetes must be focused on risk factors accompanied by regular and continuous monitoring of its development because the general risk factors for PTM in Indonesia are still relatively high, namely 33.5% do not do physical activity, 95% do not consume fruit and vegetables, and 33.8% of the population over the age of 15 are heavy smokers. Diabetes prevention and control clearly requires everyone's attention as well as national policies with a revolutionary approach. Solving the problem of diabetes is related to behavior change and building positive synergies to foster a conducive climate for aspects of prevention and behavior change at the individual, family and community levels as well as institutions such as the workplace. 3 (three) main things need to be done, namely (1) behavioral changes related to healthy and balanced food, physical activity, avoiding smoking and alcohol; (2) conduct periodic health checks; and (3) improvement of patient management by strengthening primary health services, will be a priority in the

next few years according to (Ministry of Health of the Republic of Indonesia 2019).

Intervention of the role of the family in caring for patients with diabetes mellitus. The role in this case is the attitude, action and acceptance of the family towards the sick patient. The role can be in the form of support that comes from other people such as parents, children, husband, wife or relatives who are close to the subject where the form of support is in the form of information, certain behaviors or materials that can make individuals feel loved, cared for and loved. The role of the family can have a positive impact on compliance with care management in people with Diabetes Mellitus. Patients who get family attention will find it much easier to make changes in behavior towards being healthier than patients who get less attention from their families. (Setyowati & Santoso 2019). The role of the family in the management of care for people with Diabetes Mellitus is very necessary, the involvement of family members directly to help patients is a form of role so that the management of DM care can run well, so that patients can maintain normal blood sugar levels. (Nurhayati, Syamsudin & Khoiriyah 2020).

The results of a preliminary study obtained in the RW 07 District of Duri Kepa Health Center, Kebon Jeruk District, West Jakarta, which started from November to December 2019 with a total of 217 families, obtained data on the distribution of diabetes mellitus, which is the second rank disease with a prevalence of 16.08% while the prevalence of diabetes mellitus is 16.08%. The highest prevalence was hypertension with a prevalence of 44.24% and the lowest prevalence was gout with a prevalence of 11.68%. (Results of secondary data survey in RW 07 Puskesmas Duri Kepa Village, Kebon Jeruk District 2019).

Based on this, the researcher is interested in compiling and analyzing the intervention analysis of the role of the family in caring for diabetes mellitus patients in the Duri Kepa Health Center Village, Kebon Jeruk District, West Jakarta.

## **METHODS**

This research method is a case study design research, which is a form of research (inquiry) or case studies and interventions about a problem that has a specificity with the aim of studying intensively about social units such as associations, individuals and groups, families and groups. even the general public. This study describes the role of the family in caring for patients with diabetes mellitus in the Kelurahan Duri Kepa Health Center, Kebon Jeruk District, West Jakarta.

The sample used in this study were 4 respondents with 4 subjects in the intervention group. The instruments used to obtain data in this study were in the form of interview guides, observation guidelines, notebooks, and glucometers. Analysis of the data used in this study is univariate analysis which is used to analyze each variable to determine the distribution and percentage of each variable.

## RESULTS

The results of univariate analysis in this study were used to see the distribution of respondents' characteristics and support for the role of the family in caring for patients with diabetes mellitus.

**Table 1. Distribution of Respondents in RW 07 Kelurahan Duri Kepa Health Center**

Respondent	Age	Gender	Last education	Work	Connection
Respondent 1	40 Years	Woman	junior high school	IRT	Siblings
Respondent 2	48 years old	Woman	senior High School	IRT	Couple
Respondent 3	42 years old	Woman	senior High School	Employee	Couple
Respondent 4	55 yearsold	Man	senior High School	Employee	Couple

Table 1 shows that the description of the age of the respondents in RW 07 is the majority age, namely 40 years and over. Shows that the description of gender in RW 07 is mostly female than male, namely 3 people (75%). Education Overview The majority of respondents are middle class as many as 3 people (75%). The description based on occupation shows that the most respondents work as IRT (housewives) and private employees, each 2 people (50%). And the picture based on the relationship with the client is mostly accompanied by a partner as many as 3 people (75%).

**Table 2 . Frequency Distribution of Family Roles in Caring for Diabetes Mellitus patients (n=4) in RW 07Kelurahan Duri Kepa Health Center**

Day	Family Role	Frequency	Percentage
1	Well	0	0
	Enough	4	100
2	Well	0	0
	Enough	4	100
3	Well	1	25
	Enough	3	75
4	Well	3	25

5	Enough	1	75
	Well	4	100
	Enough	0	0

Table 2 shows that the description of the role of the family in RW 07 Duri Kepa, Kebon Jeruk District, West Jakarta, from 4 respondents, obtained data that there is no family role in caring for sick family members. The lack of the role of the family in caring for patients due to the lack of supporting factors such as recognizing diabetes mellitus and the ability of the family to carry out its role in caring for the health of sick family members and also the ability of the family to carry out family health tasks.

From table 2 shows the picture. After the education and health counseling were carried out, it was found that there was an increase from the 4 respondents with the percentage value of each family role indicator even though it was not included in the category of good values in the family role. , but respondents have not been able to carry out their role in caring for the health of sick family members, and respondents have not been able to carry out family health tasks.

Table 2 shows an overview of the 4 respondents experiencing an increase in the percentage value of each family role indicator and there is 1 respondent who falls into the category of good values in the family role. In this table, respondents are able to carry out their role in caring for the health of family members who are sick but not significantly, and respondents have not been able to carry out family health tasks.

Table 2 shows an overview of the 4 respondents, 3 respondents fall into the category of good values in the family role and 1 respondent is still in the category of sufficient value but has increased the percentage value of each familyrole indicator. The reason 1 respondent has not been included in the category of good values in family roles is due to the lack of respondents in providing time to serve and listen to sick families in expressing their conditions.

Table 2 shows an overview of the 4 respondents who have entered the good value category where it is found that the percentage of values has increasedwhere in this case the respondent plays a good role in providing support for the role of the family in caring for diabetes mellitus patients such as respondents being able to recognize diabetes mellitus, being able to the family in carrying out its role in caring for the health of sick family members and the ability of the familyto carry out family health tasks.

## DISCUSSION

The results of the analysis of the role of the family in caring for diabetes mellitus

patients showed that the description of the role of the family in RW 07 Kelurahan Puskesmas Duri Kepa, Kebon Jeruk District, West Jakarta, from 4 respondents obtained data that the role of the family in caring for diabetes mellitus patients on the first day was included in the category of sufficient value because there was no the role of the family in caring for sick family members. The second day showed that from 4 respondents after the health education and education there was an increase from the 4 respondents with the percentage value of each family role indicator even though it was not included in the category of good values in the role of the family here respondents had started to recognize diabetes mellitus, The results of this study are in line with Nasution's research (2019). There are still families who have not provided good services for families suffering from DM in caring for DM patients due to barriers from the family in knowing family health education so that it cannot be done properly. Barriers from the family include the family not knowing its role as a family member as well as the unpreparedness of the family in accepting the presence of sick family members both from time and moral service.

The third day showed that from 4 respondents experienced an increase in the percentage value of each family role indicator and there was 1 respondent who entered the category of good values in the role of the family in this case the respondent began to be able to carry out his role in caring for the health of sick family members but not significant, and respondents have not been able to carry out family health tasks. The results of this study are in line with the research of Nurhayati, Syamsudin & Khoiriyah (2020) which shows that the better the role of the family owned by DM sufferers, the greater the compliance of DM patients in treating DM, including diet regulation, physical activity regulation, therapy continuity settings, health monitoring or doctor control, and early detection of disease.

The fourth day showed that from 4 respondents 3 respondents were in the category of good values in the role of family and 1 respondent was still in the category of sufficient values. The reason 1 respondent has not entered the category of good values in the role of the family is due to the lack of respondents in providing time to serve and listen to sick families in expressing their conditions. The results of this study are in line with the research of Setyowati & Santoso (2019) that family support in the form of warmth and friendliness such as emotional support related to glucose monitoring, diet and exercise can increase the patient's self-efficacy so as to support success in self-care



so that good self-care will result in better self-care. good quality of life.

The fifth day showed that 4 of the respondents had entered the category of good scores where it was found that the percentage of values had increased wherein this case the respondents played a good role in providing support for the role of the family in treating diabetes mellitus patients. The results of this study are in line with Asdie's research (2018), the success of DM management is determined by the active role of the family in controlling blood sugar levels, preventing acute and chronic complications. The researcher's analysis is based on the above, families who have a good role in controlling blood sugar in patients with diabetes mellitus. This is in line with the results of the study in the table regarding the results of daily observations of blood sugar levels from patients with diabetes mellitus, the results of which were previously in the range of 268 mg/dl-439 mg/dl.

### CONCLUSION

The role of the family in caring for diabetes mellitus patients has shown significant positive results in treating diabetes mellitus patients from day to day where the family is able to recognize diabetes mellitus, the ability of the family to carry out its role in caring for the health of sick family members. Family health such as the family acts as a coordinator, motivator, even as a supervisor for patients and adequate family support will improve the physical health of DM sufferers by reducing complications. In addition, family support can also improve adaptive and cognitive abilities, including increasing optimism for DM sufferers, reducing loneliness and increasing self-efficacy in managing DM.

### SUGGESTION

For health policy makers : For Puskesmas Duri Kepa it can be used to obtain information in order to increase knowledge and skills, especially in helping to treat diabetes mellitus patients to prevent further complications. For nursing education institutions : The results of this study can contribute to health services, namely by providing and teaching strategies for implementing nursing actions to families and especially for patients as a way to improve family and patient coping and can make the role of families to actively participate in implementing strategies for treating patients with diabetes mellitus. . For nursing researchers : The results of the next researcher are expected to conduct further research by expanding other variables related to the relationship of the role of the family to the care of patients with Diabetes Mellitus.

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