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EDUCATION ABOUT DIET MANAGEMENT OF DIABETES MELLITUS TO ELDERLY AT THE ELDERLY POSYANDU, PELEM VILLAGE, KEDIRI DISTRICT

Erni Rahmawati[1], Dwi Rahayu[1], Astri Yunita[2], Atik Setiawan Wahyuningsih[3]
[1]STIKes Pamenang Kediri
[2]STIKes Bhakti Mulia Pare
[3]IIK STRADA Indonesia

Corresponding Author:

Dwi Rahayu
ns.dwirahayu@gmail.com
STIKes Pamenang, Kediri

Article info

ABSTRACT

Diabetes Mellitus (DM) is a group of metabolic diseases characterized by hyperglycemia due to abnormalities in insulin secretion, insulin action or both. The number of DM sufferers globally increases every year, the causes include increasing population, age, obesity, and lack of physical activity. Preventive measures that can be taken include education and regular health checks. To increase knowledge and understanding of elderly about hypertension and diabetes, one of the efforts made is to provide health education about hypertension and diabetes, as well as screening elderly in Pelem Village, Kediri District. In this activity, the results showed that there was increasing knowledge about diabetes of elderly, which was the addition of information and insight about health and provided a clear description for elderly regarding the prevention and management of diabetes through counseling and educational media in the form of leaflets.

Keywords: *Diabetes, Education, Elderly*

INTRODUCTION

Diabetes Mellitus (DM) is a group of metabolic diseases characterized by hyperglycemia due to abnormalities in insulin secretion, insulin action or both. Sugar (glucose) levels in the blood exceed 110 mg/dl in a fasting state and exceed 200 mg/dl in a non-fasting state. Type 2 diabetes is the most common type, usually appearing at ages over 40 years. Many countries are not aware of the dangerous impact of diabetes on the socio-economic. Lack of awareness and lack of understanding will cause diabetes to become rampant and destroy human life. Diabetes complications arise due to irregular sugar control, wrong lifestyle, lack of due discipline, reluctance to take medication or exercise. Common symptoms of diabetes sufferers are frequent urination, fatigue and sleepiness, drastic weight loss, constant hunger, and thirst, itching around the genitals (Hasana & Ariyanti, 2021).

The number of DM sufferers globally increases every year, the causes include increasing population, age, obesity, and lack of physical activity. It is estimated that 578.4 million people will have diabetes in 2030 compared to 463 million in 2019 and by 2045 the number will increase to 700.2 million. Global diabetes cases have almost doubled. This indicates an increase in risk factors for being overweight or obese. In the last 10 years, the prevalence of DM has increased drastically, especially in countries with low- and middle-income levels, compared to countries with high income levels (Richardo et al., 2021).

It is predicted that there will be an increase in DM cases in Indonesia from 10.7 million in 2019 to 13.7 million in 2030 (International Diabetes Federation, 2019). Riskesdas, 2018 report shows that the prevalence of DM diagnosed by doctors in the population aged ≥ 15 years is 2%. This shows that there is an increase in the prevalence of DM in Indonesia compared to Riskesdas, 2013 results, namely 1.5%. Based on age grouping, the largest number of DM sufferers are in the age groups 55-64 years and 65-74 years (Richardo et al., 2021).

DM requires medical care and counseling that is used for ongoing self-management to avoid acute and chronic complications. DM control consists of 4 pillars of DM control, namely education, diet, exercise, pharmacology in Kediri District area. The number of elderly in this area is quite large and they have various health problems.

The education provided aims to increase patient self-awareness about DM disease itself, acute and chronic complications of DM and their prevention, plus other management through routine blood sugar monitoring and DM disease management (Lilyana & Pae, 2020). This educational process should consist of topics including DM pathophysiology, nutrition and diet management, pharmacological interventions, activities and exercise, self-monitoring of blood glucose levels, prevention and management of acute and chronic complications, psychosocial adjustment, problem-solving skills, stress management, and use of health service system (Sya'diyah et al., 2020).

This education or counseling on DM was held in Pelem village, Kediri District, targeting health cadres at the Elderly Posyandu. The target in achieving efforts to prevent and improve health status requires effective and communicative collaboration between the community and professional health workers. The number of professional health workers is very limited, so it requires the community to become partners with health workers in the health promotion sector. Collaboration with the community is needed in the promotional sector because health cadres at the Elderly Posyandu are one of development, especially in the health sector (Hasana & Ariyanti, 2021).

Problems that often arise in society include not realizing that they have high blood pressure and diabetes. Until now, most elderly with diabetes do not feel pain and when they have complaints, they go to the Community Health Center for treatment. To increase the knowledge and understanding of the elderly about diabetes, one of the efforts made is to provide health education about the diet management of DM to elderly at the Elderly Posyandu in Pelem Village, Kediri District.

METHOD

This Elderly Health Education Program as a form of community service activity will be held on Friday 17 May 2024 at 07:00 to 12:00 A.M. This community service

method takes the form of community participation in outreach activities and health checks. The stages in the activities include:

1. Preparatory stage
   The community service team made several preparations, namely team coordination meetings from the Nursing Team to determine the theme of the activity. The team then coordinated with the Elderly Posyandu in Pelem Village, which is assisted by 33 elderly who actively gather every month.
2. Implementation stage
   Participants gathered at the Elderly Posyandu in Pelem Village yard to take part in elderly exercise at 06.00 A.M. The first material presented regarding how to prevent DM is by controlling food, exercising, and controlling blood sugar. The second material was presented regarding monitoring education through checking blood sugar levels. Then participants were also given facilities to check blood sugar, blood pressure and uric acid to determine their health level.
   3. Reporting stage
      Community service providers report activities after the activity in the form of compiling documentation of activities and results of elderly health screening. The results of the screening were reported to the elderly through the manager of the Elderly Posyandu in Pelem Village, Kediri District.
   4. Publication stage
      Community service team publishes ongoing activities, especially through social media and scientifically. The service team publishes publications in scientific journals.

RESULT AND DISCUSSION

The results of this community service were explained to the community about how to prevent diabetes using educational leaflets to improve the level of public health in Pelem Village, Kediri District. The results of this community service were obtained as follows:

1. The public understands diabetes.
2. Society can prevent diabetes.
3. The community can provide relief from diabetes.

Table 1. Blood Sugar Measurement Results

Result of Measurement	Blood Sugar	Percentage
Normal	27	81,82%
Abnormal	6	18.18%

Community service activities begin with an approach to posyandu cadres. The first step is to approach health workers. Next was a meeting with elderly at the Elderly Posyandu in Pelem Village. After going through discussions with cadres, activities are determined and a schedule for the service to be carried out is drawn up. The material presented includes understanding diabetes mellitus, classification, signs and symptoms, complications and management of diabetes mellitus, as well as programs for managing degenerative diseases, especially DM to elderly.

This training activity was able to run smoothly due to supporting factors, such as the enthusiasm of the elderly in carrying out activities providing health care education regarding diabetes. Another supporting factor is the active role of the cadres who are involved in service activities.

This service activity begins with measuring the body weight of elderly. It is important to measure body weight to elderly because based on previous studies it is known that the cause of the increase in diabetes cases every year is influenced by lack of physical activity, being overweight, and also DM sufferers being less compliant in taking medication given by health center staff (Amalia et al. al., 2022).

The next activities carried out were measuring blood pressure and checking blood sugar levels to elderly. According to Julianti (2021), his research shows that there is a relationship between blood sugar levels and hypertension in diabetes sufferers. Blood sugar levels in the elderly need to be checked regularly so that prevention can be carried out as early as possible and prevent complications.

After measuring blood pressure and checking blood sugar levels, it was continued by providing education through counseling regarding diabetes prevention in the elderly and distributing leaflets as educational media. Health education using leaflets can increase the elderly's knowledge of diabetes. A good understanding of the prevention of this disease will encourage the formation of positive attitudes and subsequently the realization of good and correct actions (Purimahua et al., 2021).

CONCLUSION

The elderly in Pelem Kediri Village were very enthusiastic about participating in service activities, and the posyandu cadres were very active during the activities, especially when preparing for implementation so that the service activities ran smoothly. There is also an increase in knowledge about diabetes, which is the addition of information and insight about health and provides a clear picture for the elderly regarding the prevention and management of diabetes through counseling and educational media in the form of leaflets.

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