

Health Education About Diabetes Mellitus In Families

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ABSTRACT

Diabetes Mellitus (DM) is a disease characterized by blood glucose levels exceeding normal, characterized by fasting and postprandial hyperglycemia, atherosclerosis and microangiopathic vascular disease. DM can be caused by diet or genetic factors. Research conducted in Pahandut Village, Palangka Raya showed that the lack of family knowledge (67%) regarding DM can be a predisposing factor for DM in family members. Education is an effort to get people to behave or adopt healthy behaviors by means of persuasion, persuasion, appeals, invitations, providing information, providing awareness and so on, through activities called health education or promotion. The method of implementing the activity is to use a health education strategy for families in Pahandut Village, Palangka Raya. The activity carried out is to carry out health education to families in Pahandut Village, Palangka Raya. The activity is carried out using the lecture method and Q&A. The health education media used are LCD project tordan leaflets distributed to families. The material provided is about DM disease which includes the definition, causes, signs and symptoms, treatment, complications. During health education, the environment is conducive, families are enthusiastic about listening to health education and actively ask questions when given the opportunity for discussion. The results of the health education evaluation show that families are able to mention and explain again about DM disease as explained during health education. Community service activities carried out by lecturers, nurses and nursing students in families in Pahandut Village, Palangka Raya can be declared successful. Through the results of the evaluation during health education, there was a positive response from families and they were also able to mention again about DM disease as explained.

INTRODUCTION

Diabetes mellitus is an absolute or relative insulin deficiency or resistance disorder characterized by impaired carbohydrate, protein and fat metabolism [1]. The symptoms that arise are due to a lack of insulin secretion or insulin associated with microvascular and macrovascular disorders, neuropathic disorders and dermopathic lesions. In 2012 it was reported that 1.5 million people died from DM with a prevalence of around 2.7%. Of all deaths from DM in the world, 70% of deaths occurred in developing countries, including Indonesia. The global prevalence rate of DM sufferers in 2014 was 8.3% of the world's population and increased in 2014 to 387 million cases. In 2013, the proportion of Indonesians aged ≥ 15 years with DM was 6.9 percent. The highest prevalence of DM diagnosed by doctors is in DI Yogyakarta (3.0%) of 2,777,211 residents, DKI Jakarta (3.0%), of 7,609,272 residents, North Sulawesi (2.4%) of 1,698,831 residents and East Kalimantan (2.3%), of 2,753,491 residents. Based on the results of a preliminary survey conducted through interviews with 10 families in Pahandut Village, Palangka Raya, 8 (80%) families had insufficient knowledge about DM and 2 (20%) families had sufficient knowledge about DM. DM is a disorder of absolute or relative insulin deficiency or resistance characterized by impaired carbohydrate, protein and fat metabolism. The public's ignorance about DM causes many people to only find out they have DM after being examined at the hospital and being diagnosed with DM by a doctor. Based on the belief that prevention is much better than treatment, it is only right that DM prevention should receive attention. One of the best ways to prevent is to increase knowledge through health education for families. This health education can increase family knowledge to understand DM. In the management of DM, there are five pillars, including diet, exercise, monitoring, therapy and education. If the family does not know about DM, its causes, risk factors for DM, signs and symptoms, prevention methods, and treatment of DM, then the incidence of DM will continue to increase from year to year. Health education is a process of change in humans that is related to achieving individual, family, or community health goals. According to Prof. Dr. M.J. Langevelt, education is every effort, influence, protection, and assistance given to children to become adults.

The characteristics of adults are shown by their physical, mental, moral, social, and emotional abilities. Based on GBHN (General Guidelines of State Policy), education is a conscious effort to develop personality and abilities inside and outside school that lasts a lifetime [4]. Nurses have an important role in helping the community prevent DM, namely through preventive and promotive efforts. Nurses have a role in carrying out early prevention of endocrine system disorders, especially DM problems. In a very broad sense, preventive is defined as a deliberate effort to prevent disturbances, damage, or losses for a person or society, while in promotive, nurses provide

socialization and health promotion about the importance of knowing and understanding DM to prevent DM. Deaths caused by noncommunicable diseases or noncommunicable diseases are around 71% of all deaths globally or 41 million people each year. Deaths from NCDs occur at the age of 30-69 years and cases of death from noncommunicable diseases are 85% in low-income countries. Diabetes Mellitus is included in NCDs and the death rate from diabetes mellitus is around 1.5 million globally. (WHO, 2021) In 2017, it was estimated that adults with diabetes were around 451 million and in 2045 there was an increase of around 693 million. Almost half of diabetes mellitus sufferers are undiagnosed. Indonesia is included in the list of 10 countries with the most cases of diabetes mellitus in the world. (IDF, 2019) Diabetes mellitus is characterized by high blood sugar levels which can be caused by impaired insulin function, insulin secretion or both. (ADA, 2019). Individuals and families with diabetes mellitus need knowledge related to diabetes mellitus in order to be able to create conditions to prevent increased blood sugar levels and ongoing complications. Complications of diabetes mellitus can attack blood vessels, both macrovascular and microvascular, disorders of the nervous system. (Carrizzo, 2018) In the era of a prolonged pandemic, around 3 out of 4 people do not realize that they are experiencing symptoms and complaints of diabetes. This condition is caused by limited knowledge of the signs and symptoms of diabetes mellitus, lack of awareness for regular check-ups if there are symptoms related to diabetes mellitus and lack of knowledge regarding normal blood sugar level standards. (Ministry of Health, 2021) An unhealthy lifestyle such as lack of awareness in regulating eating patterns, often consuming sweet foods and drinks, soda, rarely eating fruits and vegetables can trigger an increase in a person's blood sugar levels. (Schwab, 2014), (Nur, 2017), (Ley, 2014).

Tomang Village as part of the fostered area of Tarumanagara University which is located in the scope of FK Untar and data from the Tomang Health Center shows that diabetes mellitus which is included in PTM is included in the 10 most common diseases in the Tomang Village area. In the prolonged pandemic conditions, the condition of Tomang Village residents is less concerned about diabetes mellitus because most of the Tomang Village residents are more focused on dealing with the spread of the Covid-19 virus. The potential for stress and boredom in patients with diabetes mellitus in this pandemic condition is very high. People with diabetes mellitus are susceptible to Covid-19 virus infection and there is an increase in cases of death in diabetes mellitus patients who are infected with the Covid 19 virus because diabetes mellitus which is not good in blood sugar levels causes a decrease in the body's immune system. (Ignatavicius, 2018)

RESEARCH METHODS

The method of implementing community service activities carried out is through health education provided to families in Pahandut Village, Palangka Raya City. This activity was carried out in November 2017. The purpose of implementing this activity is to make health something valuable in the family, direct healthy living methods into daily habits, help families to be able to independently carry out activities to achieve healthy living goals. The primary target of this activity is the family, which is the smallest unit of society. In order to achieve healthy community behavior, it must start at the family level. The family is a place for the cultivation of humans as members of society, if the cultivation is bad, it will clearly affect the community. The secondary target is health cadres in the family's residential area. The scope of this activity is in efforts to improve health through preventive and promotive activities, namely services for healthy families, so that they remain healthy and even improve their health status. The health education methods used are lectures and Q&A. The media used are LCD project tordan leaflets that are distributed to families who participate in health education. The implementers of health education activities are the community service team from STIKes Eka Harapan which consists of educators, facilitators, observers, notaries, and documenters.

RESULTS AND DISCUSSION

The education provided in this health education activity is about DM disease which includes understanding, causes, signs and symptoms, treatment, complications. The stages of activities carried out by the team with each task are as follows: 1. The first activity carried out by the educator is to open the activity by giving an opening greeting, introducing themselves and the team, conveying the intent and purpose of the health education activity and making a time contract with the participants. Next, the educator presents health education material using the method of giving a 30-minute lecture to the family. The media used by the educator during the presentation of the material is an LCD projector. The educator's position is in front facing the families present, occasionally walking closer to the row of participants sitting. 3. After the educator has finished presenting the material, the next is a Q&A and discussion session for 30 minutes. During the discussion, the facilitator plays a very active role in stimulating participants to actively ask questions about the topic being discussed.

During the activity, the facilitator sits spread out with the participants. Participants are very enthusiastic about the material given, they express that it is very useful because previously they did not know much about DM. 4. The final session of the activity is feedback given by the educator. Giving appreciation to participants for following the activity in an orderly manner and being enthusiastic about asking questions. 5. During the activity, the observer has the task of observing the course of the activity and recording it.

The notary carries out the activity of recording the events that take place, namely the roles of the team, participants and the surrounding environment. While the documentator is to document the activities during the activity using a camera. 6. The last activity is closing, the educator closes the activity. Knowledge is the result of human sensing, or the result of someone knowing about an object through their senses (eyes, nose, ears, and so on).

By itself, the time of sensing until it produces knowledge is greatly influenced by the intensity of attention and perception of the object. Most of a person's knowledge is obtained through the sense of hearing (ears) and the sense of sight (eyes). A person's knowledge of an object has different intensities or levels [5]. Increasing knowledge is not absolutely obtained in formal education, but can also be obtained in non-formal education. A person's knowledge of an object also contains two aspects, namely positive and negative aspects. These two aspects will ultimately determine a person's attitude towards a particular object.

The more positive aspects of an object that are known, the more positive the attitude towards the object will be. Information is something that can be known by a person to increase knowledge, but there are also those who emphasize information as a transfer of knowledge. In addition, information can also be defined as a technique for collecting, preparing, storing, manipulating, announcing, analyzing, and disseminating information for a specific purpose. Information obtained from both formal and non-formal education can have a short-term impact resulting in changes or improvements in knowledge.

The development of technology will provide a variety of mass media that can influence public knowledge about new innovations. In delivering information as its main task, the mass media also carries messages that contain suggestions that can direct a person's opinion. The existence of new information about something provides a new cognitive basis for the formation of knowledge about it.

CONCLUSIONS AND RECOMMENDATIONS

The results of this study can be a source of information for health workers, especially nurses, in providing nursing care in community settings related to health education about Diabetes Mellitus. This activity should be carried out routinely by health workers as a follow-up for the community in order to improve optimal health levels.

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