



Conducting Counseling About Diabetes Mellitus in Desa Perkebunan Tanjung Kasau. Kec, Laut Tador. Kab, Batu Bara

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Abstract. Diabetes mellitus is a chronic disease characterized by high glucose levels. Diabetes mellitus if not handled properly can cause various complications in organs such as the eyes, kidneys, heart, blood vessels and nerves which will endanger the life and affect a person's quality of life. Complications can be acute and chronic. The purpose of this article is to provide an overview of knowledge about diabetes mellitus through counseling. The method used is direct mass counseling using power point slides. The results obtained were that the extension activities went well, the participants listened and asked questions actively from start to finish.

Keyword: Diabetes, Complication, Quality of Life

Abstrak. Diabetes mellitus merupakan penyakit menahun yang ditandai dengan tingginya kadar glukosa. Penyakit diabetes mellitus jika tidak ditangani dengan baik dapat menimbulkan berbagai komplikasi pada organ tubuh seperti mata, ginjal, jantung pembuluh darah dan saraf yang akan membahayakan jiwa serta mempengaruhi kualitas hidup seseorang. Komplikasi yang ditimbulkan dapat bersifat akut dan kronis. Tujuan dari artikel ini adalah untuk mengetahui gambaran pengetahuan mengenai Diabetes melitus melalui penyuluhan. Metode yang digunakan adalah dengan penyuluhan masal secara langsung menggunakan slide power point. Hasil yang didapat adalah kegiatan penyuluhan berjalan dengan jalan, peserta mendengar dan bertanya aktif dari awal sampai selesai.

Kata Kunci: Diabetes, Komplikasi, Kualitas Hidup

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1 Introduction

Kuliah Kerja Nyata (KKN) are part of socially applicable academic activities, where students will work directly in the community to be able to apply the knowledge they have acquired in lectures which is in line with the Tri Dharma of Higher Education, namely education, research, and

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community service. Kuliah Kerja Nyata Tematik (KKNT) is also one of the Kampus Merdeka Belajar programs.

In 2000, Indonesia was in the 4th place with the largest number of diabetics with 8.4 million people according to WHO, but for the prevalence of all ages worldwide it was 2.8% and in 2003 it was estimated that there were around 194 people or 5.1% of 3.8 billion world population aged 20-79 years, in 2004 there were 1.1 million people (1.9%) of deaths caused by diabetes mellitus and the number of sufferers was 220.5 million. Data from the World Health Organization's Global status report on Non-communicable Diseases (NCD) diabetes mellitus is ranked 6th as a cause of death. The International Diabetes Federation (IDF) estimates that the incidence of DM in the world in 2012 was 371 million people, in 2013 it increased to 382 million people and it is estimated that in 2035 diabetes mellitus will increase to 592 million people.

Diabetes mellitus is a chronic disease characterized by high glucose levels. Diabetes mellitus if not handled properly can cause various complications in organs such as the eyes, kidneys, heart, blood vessels and nerves which will endanger the life and affect a person's quality of life. Complications can be acute and chronic. Acute complications occur when a sudden decrease or increase in blood glucose levels, while chronic complications occur due to the effect of increasing blood glucose levels for a long time.

These complications can result in a shortened life span, disability and increased economic burden for clients and their families. Diabetes mellitus disease will accompany the patient for life so it will greatly affect the quality of life of the patient if they do not get proper treatment. According to Yudianto (2008) in [1], quality of life is a feeling of satisfaction and happiness so that patients with diabetes mellitus can carry out their daily lives properly.

But in fact, the decrease in quality of life in patients with diabetes mellitus is often followed by the inability of these patients to carry out self-care independently which is usually called self-care. The inability of diabetes mellitus patients to carry out self-care can affect the quality of life in terms of physical health, psychological well-being, social relationships, and relationships with the environment [2].

Self-care for people with diabetes mellitus is more focused on preventing complications and controlling blood sugar. If the self-care is done properly, it can indirectly improve the quality of life of patients with diabetes mellitus so that they can carry out their daily activities normally.

Self-care is a description of the behavior of an individual that is carried out consciously, is universal, and limited to oneself [2]. According to Sigurdardottir (2005); Xu Yin et al (2008); and in The Summary of Diabetes Self-Care Activities (SDSCA) by Toobert, D.J et al (2009) in [3], self-care carried out in patients with diabetes mellitus includes dietary adjustments (diet), monitoring of blood sugar levels, drug therapy, foot care, and physical exercise (exercise). One

of the recommended sports is aerobics, because the need for oxygen during work must be continuously met by the body, so that the oxygen transport system, which mainly consists of the lungs, heart and blood vessels, must work intensively and continuously so that energy expenditure takes place effectively.

Diabetic gymnastics is aerobic physical exercise for diabetics with a series of movements that are chosen deliberately by following the rhythm of the music so as to produce certain rhythmic provisions, continuity and duration to achieve certain goals. Diabetic exercise would be better done within 45 minutes with a frequency of 3-5 times per week [4].

Self-care theory is a theory put forward by Dorothea Orem. According to Orem self-care can increase the improvement of human functions and development in social groups that are in line with human potential, know human limitations, and the human desire to be normal. Deviations in self-care can usually be seen at the time of the disease.

The disease can affect certain body structures and physiological or psychological mechanisms but also affect human function [5]. So if self-care is done properly it will improve the patient's quality of life. Conversely, self-care that is carried out poorly will have a negative impact on the quality of life of patients with diabetes mellitus. Self-care that is carried out seriously can have a good impact on improving the quality of life.

2 Methods

Implementation of KKNTD USU (KKN Tematik Diperpanjang Universitas Sumatera Utara). The implementation time starts from 20 September 2022 – 20 December 2022. The place of implementation is in Desa Perkebunan Tanjung Kasau, Kec. Tador Sea, Kab. Batu Bara. Implementation stages include:

1. Choose a location that will be used as a place for counseling

The chosen location is the village hall office field

2. Conduct counseling about diabetes mellitus

Conduct counseling on diabetes mellitus in the field of the village hall office which aims to educate the public about diabetes mellitus by conducting counseling, doing diabetic exercises and ending with checking blood sugar.

3. Monitoring and Evaluation

In carrying out counseling about diabetes mellitus, local residents can cooperatively participate in a series of activities carried out starting from counseling, carrying out joint diabetic exercises and finally carrying out blood sugar checks.

3 Results and Discussion

The KKN which was carried out in Desa Perkebunan Tanjung Kasau for about 3 months made it a place for nursing students to convey the knowledge they had gained in previous lectures. As with diabetes mellitus, it turns out that there are still people who have difficulty dealing with it. The purpose of this activity is to find out about health problems and what activities can alleviate and help the problems being faced by the community.

3.1 Results

After knowing the problems that exist in Desa Perkebunan Tanjung Kasau, the author knows that there are still people who do not understand what diabetes mellitus is, how to control blood sugar levels, and lack of self-awareness to routinely check their health at the nearest health service. So the authors conduct health education about diabetes mellitus.



Figure 1. Health Education About Diabetes Mellitus

3.2 Discussions

Diabetes mellitus is one of the diseases that can be inherited at this time with the highest incidence rates besides heart disease and stroke [6]. Diabetes mellitus is a collection of symptoms that arise in a person caused by an increase in blood sugar levels due to a lack of insulin, both absolute and relative [7].

In the counseling held by the author, it was found that the high level of physical activity carried out by local residents, but the lack of self-awareness to have their health checked regularly at the nearest health service.

Table 1. Blood Sugar Check Results

Day/Date	Name	Age	Result
Minggu, 16 Okt 2022	Nining	44 tahun	141 mg/dL
Minggu, 16 Okt 2022	Mardiana	48 tahun	170 mg/dL
Minggu, 16 Okt 2022	Rifa	37 tahun	95 mg/dL
Minggu, 16 Okt 2022	Butet	43 tahun	171 mg/dL
Minggu, 16 Okt 2022	Opung lubis	72 tahun	163 mg/dL
Minggu, 16 Okt 2022	Wagiyem	72 tahun	105 mg/dL
Minggu, 16 Okt 2022	Supiyah	67 tahun	111 mg/dL
Minggu, 16 Okt 2022	Sri	39 tahun	108 mg/dL
Minggu, 16 Okt 2022	Nur	32 tahun	134 mg/dL

According to the American Diabetes Association, diabetes mellitus is a group of metabolic diseases with characteristic hyperglycemia that occurs due to abnormalities in insulin secretion, insulin action, or both. Common symptoms of diabetes mellitus are polyuria, polyphagia, polydipsia. The classification of diabetes mellitus is Type 1 Diabetes Mellitus, Type 2 Diabetes Mellitus, Gestational Type Diabetes Mellitus, and Other Types of Diabetes Mellitus. The most common type of diabetes mellitus is Diabetes Mellitus Type 2, in which around 90-95% of people suffer from this disease.

In the counseling held by the author, it was found that there were some local residents who were able to control their eating patterns. Diet, blood sugar control, consumption of exercise drugs and others are things that can cause high levels of stress and anxiety in people with diabetes mellitus which must be consumed throughout life [8]. Changing lifestyle and diet is very difficult for people with diabetes mellitus. This is because patients have to change the habits they have been doing for decades, then they have to change drastically [9]. Changes in eating patterns and dietary doses recommended by doctors are a threat to diabetes mellitus patients, and it is possible to experience stress in carrying out a healthy lifestyle and diet [10].

The stress experienced by diabetes mellitus patients in the long term can worsen their health condition. Stress can produce changes in psychological and physiological aspects. According to Sarafino (1990) in [11], that stress can cause changes in the body's physical system that can affect health. The state of stress in patients with diabetes mellitus has a negative effect, which can increase catecholamine secretion in stressful conditions which can trigger glycogenolysis, hypoglycemia and hyperglycemia [12]. The stress experienced by diabetes mellitus patients in carrying out a healthy lifestyle and diet if left too long will worsen individual health.

Knowledge of diet is very important for patients with diabetes mellitus, in order to avoid complications so that an intervention is needed to increase knowledge about the disease, the management process, treatment therapy, interactions, eating patterns, physical activity, and utilization of existing health facilities in the community [13]. Basically, many diabetes mellitus patients already know about dietary recommendations but do not comply because many think that dietary food for diabetes mellitus patients tends to be unpleasant, so they eat according to their wishes if they have not shown serious symptoms [14].

Management that is very important at this time for people with diabetes is the prevention of complications, one of the factors that cause it is an unhealthy lifestyle that can be overcome with physical exercise. In addition, according to Colberg (2010) in [15], physical activity must be carried out at least three times a week because the effect of one exercise as recommended on insulin sensitivity can only last for 24 to 72 hours.

By doing physical activity, will affect glucose levels in the blood. When physical activity in the body increases the use of glucose in the muscles will also increase. When the body cannot replace the high glucose requirement due to high physical activity, the glucose level will be lower than normal (hypoglycemia), conversely when glucose levels exceed the body's ability to process it and physical activity is lacking so that glucose levels will increase from normal limits (hyperglycemia).

Therefore, controlling glucose levels must be done so that glucose levels remain within normal and stable limits so that homeostasis is achieved in the body. By controlling glucose levels in the blood, it will have an impact on improving the quality of life in patients with diabetes mellitus and can be done as an effort to control diabetes mellitus.

4 Conclusion

Diabetes mellitus is a chronic disease characterized by increased glucose levels more than normal limits in the body. This disease is a non-communicable disease but always increases every year. In the counseling conducted by the author, it was found that there was a lack of knowledge and lack of self-awareness to go to health services so that many local residents only learned about diabetes mellitus in more detail through this counseling. The management of diabetes mellitus is by changing bad lifestyles and controlling glucose levels so that there is a balance in the body so that it has a good impact on improving the patient's quality of life.

The conclusion from this activity is that counseling about diabetes mellitus gets a very good response by local residents, it can be seen from the high enthusiasm of the residents in listening to the materials provided by the author, so the writer hopes that local residents can pay more attention to themselves by routinely checking their health to the nearest health service.

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