

Hospital-Based Community Health Education on Foot Care for Patients with Diabetes Mellitus

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Abstract

According to the World Health Organization (WHO), diabetes is a chronic metabolic disease characterized by elevated blood glucose levels, which over time can cause serious damage to the heart, blood vessels, eyes, kidneys, and nerves. Diabetic foot is a common complication among people with diabetes, often manifested through pain, numbness, cold sensation, pallor, and wounds that are slow to heal – sometimes even becoming infected. This community health service activity took place at RSUD H. Abdul Manap on November 30, 2023, with the aim of increasing awareness and understanding of proper foot care among diabetic patients, enabling them to apply these practices in daily life. Proper foot care behavior involves maintaining hygiene and preventing early signs of injury, which if left untreated, may result in infection and even amputation. Thirty participants attended this program, which included educational sessions and interactive discussions. The event was successfully executed with strong engagement from the participants.

Keywords: Diabetes mellitus, foot care, health promotion

A. INTRODUCTION

Diabetes mellitus is a disease caused by chronic metabolic disorders characterized by an increase in blood glucose levels above the normal range (Ministry of Health of the Republic of Indonesia 2020). Diabetes mellitus is a condition of chronic hyperglycemia with metabolic disorders due to hormonal disorders that cause various long-term complications in the eyes, kidneys, blood vessels, and lesions appear on the basement membrane when viewed from an electron microscope examination (Rumiris, 2020). Diabetes Mellitus is another term for the silent killer which means killing silently because most sufferers do not realize that they have diabetes, then after finding out, acute or chronic complications have occurred. (Prasetyani, D and Sodikin 2017).

According to WHO, diabetes is a chronic metabolic disease characterized by elevated blood glucose (or blood sugar) levels, which over time cause serious damage to the heart, blood vessels, eyes, kidneys, and nerves. The most common is type 2 diabetes, usually occurring in adults, which occurs when the body becomes resistant to insulin or does not produce enough insulin. In the past 3 decades, the prevalence of type 2 diabetes has increased dramatically in countries of all income levels. Type 1 diabetes, formerly known as juvenile diabetes or insulin-dependent diabetes, is a chronic condition in which the pancreas produces little or no insulin (Damayanti, 2015).

At the end of 2021, the International Diabetes Federation (IDF) in its 10th edition of the Atlas confirmed that diabetes is one of the fastest growing global health emergencies of the 21st century. In 2021, more than half a billion people worldwide are living with diabetes, or 537 million people to be exact, and this number is projected to reach 643 million in 2030, and 783 million in 2045. In addition to the large number of people with diabetes, it is estimated that the number of people with blood glucose levels that are starting to increase or in the prediabetes phase, namely impaired glucose tolerance in 2021 is around 541 million. Diabetes in this population also has consequences for high mortality rates related to diabetes, which is estimated at more than 6.7 million in the adult group aged 20–79 years. (Hidayati, 2019).

Based on prevalence, Indonesia is the fifth highest country in the world after China, India, Pakistan, and the United States with a prevalence of diabetes mellitus cases at the age of 20-79 years (19.5 million). Diabetes is the third highest cause of death in Indonesia. Based on the results of the 2018 Riskesdas, the prevalence of diabetes mellitus in Indonesia based on a doctor's diagnosis at the age of ≥ 15 years was 2%, an increase from the previous results of the 2013 Riskesdas which was 1.5%. However, if you look at the prevalence of diabetes mellitus from the results of blood sugar tests in 2018, it was 8.5%, an increase from 2013 by 6.9%. (Laksono, 2020) Diabetes mellitus is a disease that cannot be cured and if not treated properly, life-threatening complications will arise.

Diabetic foot is one of the many complications of diabetes mellitus. Diabetic foot is a disorder of the lower leg due to uncontrolled blood sugar. Signs and symptoms of diabetic foot are pain in the lower leg when resting, cold to the touch, tingling and fatigue, weak blood vessel pulsation, feet become pale when raised and ulcers/gangrene. We often find sufferers complaining that their feet feel sore, numb, cold, feet look pale and wounds are difficult to heal, not infrequently patients' feet are already infected. This can happen because sufferers usually ignore or ignore problems with their feet that are considered trivial, but if left untreated for a long time it will cause serious infections in the feet and complications. This condition can be avoided with proper foot care (Saraswati, 2022).

This is in line with research conducted by Dafriani and Marlinda 2020, that providing education to diabetes patients must be comprehensive, namely not only improving cognitive aspects, but also affective and psychomotor aspects so that it is hoped that it can change behavior and improve the quality of life of diabetes patients to be better and can reduce the incidence of foot problems which until now are still problems that must be minimized immediately for diabetes patients.

Counseling activities on foot care for diabetics, especially at Abdul Manap Regional Hospital, Jambi City, need to be carried out as a form of effort in preventing and managing diabetes holistically and as a source of knowledge to maintain and improve health status in patients. With this activity, it is hoped that diabetics can carry out foot care to avoid infections and diabetic ulcers on the feet.

B. METHODS

The target of the activity was carried out in the internal medicine polyclinic of H. Abdul Manap Hospital with a total of 30 participants. The form of activity carried out was in the form of Hospital Public Health Counseling regarding foot care for diabetes mellitus patients, aiming to increase the knowledge of participants regarding foot care carried out independently at home.

During the evaluation, participants were also given time to discuss questions and answers about the material that had been presented during the counseling. This was followed by the moderator asking questions again according to the material which aimed to determine the extent of the participants' understanding of the material provided. This counseling activity lasted for 45 minutes. To determine the achievement of participant knowledge, questions were given with the following grid: participants are able to state the definition of foot care, participants are able to know the purpose of foot care, participants are able to know the risk of foot problems that often arise, participants are able to know the prevention of complications in diabetics, participants are able to know how to care for feet.

The tools used in this counseling are laptops, microphones, and infocus. Then the media or instruments of this counseling are leaflets, Power Point, Posters, and baby oil.

C. RESULTS

Counseling on Foot Care for diabetic patients was held on Thursday, November 30, 2023 in the Internal Medicine lobby of H. Abdul Manap Hospital, Jambi City. There were 30 participants present. The series of activities were Counseling on Foot Care and a question and answer session regarding the material provided. The implementation of this activity went according to expectations, participants paid attention to the material presented and were active in the counseling.



Figure 1. Opening of Activities

The number of participants who attended was more than 30 people, according to the initial target of 30 people. Before the event began, participants were directed to fill in the attendance. The counseling event was opened with a speech from the head of PKMRS, then continued by making a time contract with the participants and asking participants about general knowledge about foot care. After that, the presentation of the material for 30 minutes, and the last 15 minutes were a discussion session between participants and the speaker.



Figure 2. Discussion Session

The counseling took place according to plan, from the opening to the closing. The entire counseling event was carried out smoothly, with competent delivery of materials and active participants asking questions during the counseling.



Figure 3. Group photo

D. CONCLUSION

The entire series of activities went smoothly. The activity was carried out on Friday, November 30, 2023 in the Internal Medicine Polyclinic Lobby of H. Abdul Manap Hospital, Jambi City. The number of participants who participated was 30 people. The series of activities included educational counseling on foot care for people with diabetes mellitus. It is hoped that this activity will continue and this activity can improve the quality of public health in foot care in preventing diabetes mellitus wounds that have more severe impacts. And it is hoped that the community can apply the education that has been provided in everyday life in foot care for people with diabetes mellitus.

E. ACKNOWLEDGMENT

Group 3 of the Nursing Profession of Jambi University would like to express their deepest gratitude to the Health Counseling Team of the H. Abdul Manap Hospital for their cooperation and participation as partners during this counseling. The strong collaboration between the Health Counseling Team of the H. Abdul Manap Hospital has become the foundation for success in carrying out the Nursing Profession Practice in the Basic Nursing Profession block. Group 3 of the Nursing Profession of Jambi University hopes that this collaboration will continue and have a positive impact in efforts to serve and improve the quality of life of diabetes mellitus sufferers.

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