

POLITEKNIK KESEHATAN KEMENKES PALANGKA RAYA: HEALTH FORUM AND INTERNATIONAL SEMINAR
THE NEW NORMAL: Creating a Pleasant Virtual Communication

The roles of educators in Diabetes Mellitus prevention and management for Type 2 Diabetes Mellitus patients at Pahandut Public Health Care, Palangka Raya City

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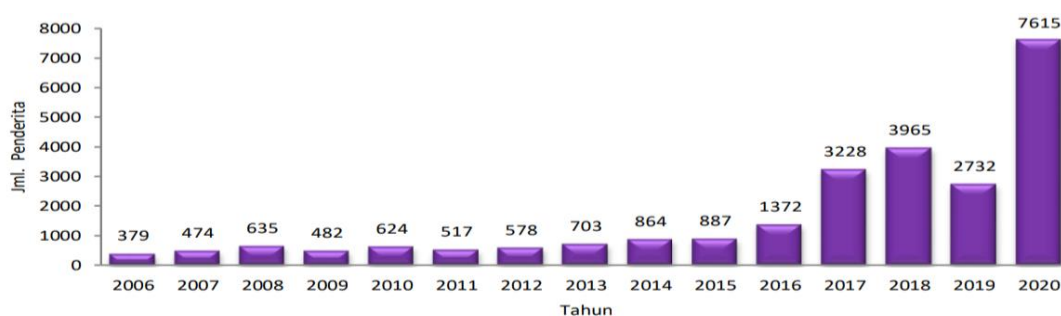
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Diabetes Mellitus Type 2 is the most common endocrine disease and the most common form of diabetes. The results of research conducted at the Hasanuddin University Teaching Hospital using data from 2014-2018 show that there are four factors that influence the prediction of DM patient status, namely; Fasting Blood Glucose (GDP), LDL Cholesterol, Triglycerides, and Body Weight (Ente et al., 2020). Diabetes Mellitus (DM) Type 2 requires medical care and self-management education to prevent acute complications and reduce the risk of chronic complications. The American Diabetes Association (ADA) defines DM as a chronic disease that requires independent DM management and education in order to prevent acute and chronic complications (Care & Suppl, 2020).

Diabetes Mellitus management requires 4 pillars, namely medical nutrition therapy, medicine, exercise and health education. One of the steps that nurses can take is to provide proper health education to patients in order to increase patient independence so that diabetes management is optimal (Simamora et al., 2021). Nurses act as diabetes educators for the community in an effort to improve health status through health education because diabetes educator as providing direct patient care and have direct influence in care and services that people with diabetes receive (Rinker et al., 2018).



Sumber : Bidang P2P (Pencegahan dan Pengendalian Penyakit)

Figure 1 Number of DM patients in Palangka Raya City (2006-2020)

In Palangka Raya City, people with diabetes who come and seek treatment at the puskesmas increased quite sharply in the last 6 years, this is shown by increase in people with diabetes in the period 2006-2020. In 2020 happens a significant increase in the number of 7,615 cases of people with diabetes mellitus, this shows that health promotion has not been able to reduce the number of people with diabetes mellitus in the city of Palangka Raya. The proportion of people with diabetes is generally of productive age, this is influenced by: risk factors for diabetes mellitus which are generally found in productive age. The risk of diabetes mellitus includes an unhealthy lifestyle such as a poor diet tend to have excess calories, lack of activity (exercise) and obesity which will have an impact on on decreased productivity, increased dependence of patients on family and community and the need for high costs for treatment (Dinas Kesehatan Kota Palangka Raya, 2021).

According to the Central Kalimantan Statistics Agency in 2016, Diabetes Mellitus (DM) is the 5th most common disease of the 10 most common diseases in Central Kalimantan Province. The results of the initial data collection in the work area of the Pahandut Public Health Care, Palangka Raya City, showed that the level of community involvement in self-care for people with DM was still relatively low. This happens because sufferers often ignore or are not aware of the dangers of DM for their lives. Puskesmas as the primary health care provider can carry out home visit to Diabetes Mellitus patients to reduce complications and improve the quality of life for Diabetes patients. This activity was attended by 20 people with DM in the working area of the Pahandut Health Center on Jalan Rindang Banua, Palangka Raya City.



Figure 2 The health education in Pahandut Health Care on Jalan Rindang Banua, Palangka Raya City

Health education activities have started with checking blood sugar, blood pressure, weight and height. then health education is carried out using leaflet media about the prevention and management of DM.



Figure 3 Check blood sugar diabetes patient as a monitoring effort in controlling DM



Figure 4 Check blood pressure diabetes patient as a monitoring effort in controlling DM



Figure 5 Check weight and height diabetes patient as a monitoring effort in controlling DM

After check the examination of blood sugar, blood pressure and weight in DM patients have been completed, then an assessment of the level of knowledge was carried out by given a knowledge questionnaire for all participants present. The results of the data collection found as many as 20 people aged around 30-59 years and had suffered from DM for more than 1 year and 12 people (60%) with blood sugar >200 mg/dL, 14 people (70%) regularly took antidiabetic drugs while 6 people (30%) no longer take drugs because they feel bored. The results of the pretest also found that there were 9 people (45%) who scored >56 (less knowledge). This shows that DM sufferers still do not have adequate knowledge and management in handling their health problems, so that these conditions make DM sufferers unable to take care of themselves optimally.

Based on these data, the material has been delivered for 20 minutes using LCD and microphone media. Furthermore, a question and answer discussion session was given which allowed all participants to actively ask questions in conveying the obstacles or problems they faced in overcoming their health problems. Health education activities regarding the prevention and management of acute and chronic complications of DM is one of the efforts in controlling DM disease especially on the Diabetes Mellitus management requires 4 (Banerjee et al., 2020; Efendi et al., 2021; Indaryati, 2018; Simamora et al., 2021).



Figure 6 Health Education Activities



Figure 7 Discussion Session

From this activity, some data related to the knowledge of DM sufferers were obtained after health education was carried out, namely the post-test results showed 17 people (85%) scored >56 . This comparison of the level of knowledge before and after health education is a short-term evaluation of increasing knowledge which is expected to also improve the ability of DM patients in preventing and managing DM against acute and chronic complications by regularly consuming healthy foods (low glucose), increasing physical activity in the form of sports activities (physical activity for 20-30 minutes performed 3-4 times a week can increase insulin so that blood glucose levels decrease), using diabetes medication in accordance with the right dose safely and regularly, as well as monitoring blood glucose independently, maintaining weight, not smoking and avoiding cigarette smoke, and avoid increasing blood pressure and cholesterol, will support diabetics to stay healthy and reduce the risk of complications of Diabetes Mellitus. The majority of participants were enthusiastic and felt excited to be able to change a healthier lifestyle so that they could control their blood sugar throughout their lives.

Health education by DM educators is one of the planned efforts to influence other people, both individuals, groups and communities so that they can do what educators expect, especially for people with DM in improving their quality of life. Counseling by DM educators to patients and their families is urgently needed to improve the management of type 2 DM by patients (Ramadhan et al., 2018). Chronic complications from diabetes usually develop gradually and occur when diabetes isn't properly managed. The most principle of DM complications management is to regulate blood glucose levels so as to not damage the body's organs. Uncontrolled high blood glucose levels over time will increase the danger of complications,

namely serious damage to all or any organs of the body. By health education will reduce the incidence and/or worsening of diabetes-related complications, such as kidney (nephropathy), eye (retinopathy) and limb (lower) complications. Health education can also improve lifestyle behaviors, improve lifestyle behaviors, reduce diabetes-related stress and reduce all-cause mortality (Powers et al., 2020).

Diabetes management may be a lifelong responsibility. Diabetes management requires initiative and regularity to always implement a healthy lifestyle for people with diabetes. People with DM must be able to prevent complications as early as possible independently and learn to evaluate themselves and make the right decisions in fulfilling their life needs, especially in emergency conditions. Family involvement is also expected to assist DM sufferers in controlling their blood sugar levels such as assisting in providing information support, material support and support in medication adherence (Sulistiyowati & Astuti, 2020). The higher the diabetic is able to manage blood glucose levels, blood pressure and blood fat levels, the lower the risk of DM complications.



Figure 8 DM educator team and DM sufferers in Pahandut Health Care on Jalan Rindang Banua, Palangka Raya City

DM educator plays an active role in providing health services for the entire community in order to improve the health status of the community. DM educators can work together with other health teams to maximize health services. It is also necessary to empower families and communities in helping people with DM in overcoming their health problems, so that they can improve their quality of life for the better.

Consent

The adults (identifiable) photographed have given their consent for their pictures to be used in the dissemination and publication of this research.

Conflict of Interest

None

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