



The Effect of Media Guidance Motion Picture Education) on Increasing Knowledge of Foot Care for Diabetics Type 2 Mellitus at the Kabila Regency Health Center Bone Bolango

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ABSTRACT

The management of DM is still considered underestimated, so disease control is not optimal. Less than optimal management of DMT2 sufferers can cause DMT2 sufferers to experience complications. Neuropathy as a form of microvascular complication plays a role in the appearance of diabetic ulcers. Diabetic ulcers can be prevented and controlled so that they do not develop into more severe through various ways, one of which is by providing education about foot care, as well as doing regular foot care every day. This study aims to determine the effect of motion picture guidance media education on improving foot care knowledge for patients with Type 2 Diabetes Mellitus at the Kabila Health Center, Bone Bolango Regency. This research method uses a type of experimental quasi-research with a one-group pre-post test design with a sample of 56 patients with Type 2 DM at the Kabila Health Center. The analysis technique used the paired sample t test. The results of the study showed that the average value of knowledge level before and after being given education was 47,976. The results of the paired sample t-test obtained a p value of $0.001 < 0.05$, it can be said that there is an effect of motion picture guidance media education on improving the knowledge of foot care for patients with type 2 diabetes mellitus with a correlation value of 0.506 (adequate category). The conclusion is that there is an influence of Guidance Motion Picture media education on improving knowledge of foot care for people with type 2 diabetes mellitus at the Kabila Health Center, Bone Bolango Regency.

INTRODUCTION

Diabetes Mellitus is a degenerative disease characterized by high glucose levels in the blood or called hyperglycemia. Diabetes mellitus is a metabolic disorder involving proteins, carbohydrates, and fats with the main characteristic being hyperglycemia. This condition can be caused by inadequate insulin production, decreased insulin working effectiveness, or a combination of the two (Octaviana & Hati, 2023). DM is one of the chronic diseases that has a high prevalence rate and is the second largest cause of death in adults globally (Sabri et al., 2023).

Based on data by World Health Organization In 2021, it is found that worldwide the number of DM sufferers is estimated to reach around 422 million people, with the direct death rate from this disease reaching 1.6 million people every year (World Health Organization, 2021). According to International Diabetes Federation (IDF), estimates that in the period 2021 to 2045, there will be around 425 million people with DM in the age group of 20–79 years in low- and middle-income countries. If it covers the ages of 18–99 years, this number is estimated to increase to 451 million people. Of the total cases, about 87% to 91% are type 2 diabetes mellitus (DMT2), while about 7% to 12% have type 1 diabetes (Chloranyta et al., 2024).

Based on data from the 2023 Indonesian Health Survey, the prevalence of DM sufferers in Indonesia in the age group ≥ 15 years is 2.2% with Gorontalo Province ranking 8th with the 8th most DM sufferers at 2.3% (Ministry of Health of the Republic of Indonesia, 2023). The prevalence of DMT2 patients in Gorontalo

Province in 2024 is 6,095 patients in Boalemo Regency, 5,206 patients in Bone Bolango Regency, 6,203 patients in Gorontalo Regency, 2,368 in North Gorontalo Regency, 2,886 patients in Gorontalo City, and finally 827 patients in Pohuwato Regency (Gorontalo Provincial Health Office, 2024)

Bone Bolango Regency is the 2nd highest number of DM sufferers with the first prevalence, the first sub-district with DM sufferers is Kabila District with 390 old patients and 263 new patients (Bone Bolango Regency Health Office, 2024). Among the number recorded, 18 patients were found to have amputations and as many as 23 underwent debridement at Toto Kabila Hospital (Toto Kabila Hospital, 2024).

The increasing prevalence of DM sufferers shows the need for serious attention. The management of DM is still considered underestimated, so disease control is not optimal. Less than optimal management of DMT2 sufferers can cause DMT2 sufferers to experience complications. Complications due to DM are generally divided into two categories, namely microvascular and macrovascular complications (Chloranyta et al., 2024). Macrovascular complications are complications that affect large blood vessels such as brain blood vessels, peripheral blood vessels, and coronary arteries. While microvascular complications can include the occurrence of neuropathy (damage to the nervous system in the legs), retinopathy (blindness), and nephropathy (kidney disease) (Sari et al., 2021).

Neuropathy as a form of microvascular complication plays a role in the appearance of diabetic ulcers where this occurs which in later conditions can lead to the amputation of the lower limb in patients (Webber, 2021). Neuropathy causes changes in the skin and muscles, thus affecting the distribution of pressure in the soles of the feet and reducing sensation in the feet. This condition eventually facilitates the onset of ulcers. High blood glucose levels are a medium for bacterial growth, increasing the risk of infection. An uncontrolled infection can develop into gangrene. In addition, poor blood circulation makes it harder to handle diabetic ulcers and can accelerate the progression to more severe gangrene (Setyorini et al., 2020).

Diabetic ulcers are one of the most feared chronic complications by people with diabetes mellitus, because they require a long treatment time and high treatment costs are even up to three times greater than DM patients without ulcers (Stars, 2024). The morbidity rate in diabetic ulcer patients reaches 65% within 3-5 years, with the lower extremity amputation rate reaching 50% in recent years (Chloranyta et al., 2024).

Diabetic ulcers can be prevented and controlled so that they do not develop into more severe through various ways, such as improving vascular and circulatory disorders, keeping blood glucose levels controlled, providing education on foot care, and doing regular foot care every day (Setyorini et al., 2020).

The results of the study revealed that 60% of people with type 2 diabetes have a lack of knowledge about foot care (Wibowo et al., 2023). This is in line with the importance of education as an effort to form knowledge and awareness of DM sufferers to maintain and take care of their feet regularly (Stars, 2024). Education on foot care aims to increase the understanding of people with diabetes mellitus of the risk factors for diabetic ulcers, as well as reduce the number of patients who are at high risk of developing complications in the feet. Thus, it is hoped that DM sufferers can take care of and maintain the health of their feet independently (Webber, 2021).

There are many educational media that can be used to educate about how to care for feet for people with DM such as leaflets, posters, or videos. One effective method to use is through video media. Video has the advantage of combining audio and visual elements, so that the delivery of information becomes clearer and easier to understand (Chloranyta et al., 2024).

A number of studies have shown that the use of video as an educational medium is effective in significantly increasing knowledge after screening. The results of the study conducted by Octaviana & Hati (2023), revealed that providing foot care education through video media can increase knowledge about DM foot care in DMT2 patients. In addition, the results of the study conducted by Chloranyta et al. (2024), showing that after being given health education through audiovisual media, there was a change in the level of knowledge about foot care in patients with type 2 DM.

Examples of video media that can be used are Guidance Motion Picture (GMP). Guidance Motion Picture constitute A video media used as a means of foot care education, which contains text, moving images, and sound to support the understanding of foot care material (Setyorini et al., 2020). The results of the study conducted by Setyorini et al. (2020), showing that DM patients' knowledge of foot care increased after being educated using the media Motion picture guidance compared to being educated using the media leaflet.

Based on initial observations at the Kabila Health Center, researchers found that the number of patients with type 2 diabetes mellitus in the Kabila Health Center Working Area was 653 patients. By interviewing 5 DM patients at the Kabila Health Center, it was found that 2 new patients said that they had never been given an explanation about foot care so they did not know how to treat foot in preventing injuries, all they knew was checking and controlling blood sugar levels. The other 3 said they had received foot care education in the form of leaflets but it had been a long time and the sheets were easily scattered so all they remembered was keeping their feet clean and when working in the yard they usually did not use sandals. In addition, the educational media available at the Kabila Health Center is only in the form of leaflets placed in its place and there is no special briefing from the officers. They think that anyone can immediately take the leaflet.

RESEARCH METHODS

This research is a type of quasi-experimental research with a one-group pre-post test design. This research was conducted in the Kabila Health Center Area, Bone Bolango Regency.

The population in this study is 125 people with diabetes mellitus in the work area of the Kabila Health Center in the last 3 months in 2025. The sampling technique in this study uses a non-probability sampling technique, namely accidental sampling with a total of 56 samples.

The research instrument used a questionnaire on the level of knowledge about diabetic foot care as many as 15 question items and Guidance Motion Picture media. The data analysis technique in this study uses the paired sample t test.

RESULTS

Respondent Characteristics

Age

The results of the research that have been carried out have obtained an overview of the frequency distribution of respondent characteristics based on the age of the respondent as follows.

Table 1 Distribution of Frequency of Characteristics of Type 2 DM Patients at Kabila Health Center by Age

Age	Frequency (n)	Percentage (%)
Toddlers/Children (0-11 Years)	0	0,0
Teens (12-25 Years)		
Adults (26-45 Years)	0	0,0
Senior (46-65 years old)	29	51,8
	27	48,2
Total	56	100,00

Source: Primary Data, 2025

Based on table 1 above, patients with Type 2 DM at the Kabila Health Center are dominated by adult patients, which is 51.8%, followed by the elderly, which is 48.2%.

Gender

The results of the research that have been carried out provide an overview of the frequency distribution of respondent characteristics based on the gender of the respondent as follows.

Table 2 Distribution of Frequency Characteristics of Type 2 DM Sufferers at Kabila Health Center by Gender

Gender	Frequency (n)	Percentage (%)
Women	45	80,4
Male	11	19,6
Total	56	100,00

Source: Primary Data, 2025

Based on table 2 above, patients with Type 2 DM at the Kabila Health Center are dominated by female patients, which is 80.4%, followed by men, which is only 19.6%.

Education

The results of the research that have been carried out have obtained an overview of the frequency distribution of respondent characteristics based on the respondent's education as follows.

Table 3 Distribution of Frequency Characteristics of Type 2 DM Patients at Kabila Health Center Based on Education

Education	Frequency (n)	Percentage (%)
SD	9	16,1
SMPSMADiploma/Bachelor	11	19,6
	26	46,4
	10	17,9
Total	56	100,00

Source: Primary Data, 2025

Based on table 3 above, patients with Type 2 DM at the Kabila Health Center are dominated by patients with high school education, which is 46.4%, followed by high school education, which is 19.6%, diploma/bachelor's education, which is 17.9%, and elementary education, which is 16.1%.

Jobs

The results of the research that have been carried out have obtained an overview of the frequency distribution of respondent characteristics based on the respondent's work as follows.

Table 4 Distribution of Frequency Characteristics of Type 2 DM Sufferers at Kabila Health Center Based on Work

Jobs	Frequency (n)	Percentage (%)
Farmer/Fisherman/Labourer	8	14,3
IRT	23	41,0
Self-employed	8	14,3
Civil Servant/Honorary	6	10,7
Retirees	3	5,4
Private Employees	8	14,3
Total	56	100,00

Source: Primary Data, 2025

Based on table 4 above, patients with Type 2 DM at the Kabila Health Center are dominated by patients who work as IRTs, which is 41.0%, followed by those who work as farmers/fishermen/laborers, self-employed, and private employees equally, which is 14.3%, working as civil servants/honorary people, which is 10.7%, and finally as retirees, which is 5.4%.

Long Suffering from DM

The results of the research that have been carried out have obtained an overview of the frequency distribution of respondent characteristics based on the length of time suffering from DM as follows.

Table 5 Distribution of Frequency of Characteristics of Type 2 DM Sufferers at Kabila Health Center Based on Length of Suffering from DM

Long Suffering from DM	Frequency (n)	Percentage (%)
< 5 Years	34	60,7
≥ 5 Years	22	39,3
Total	56	100,00

Source: Primary Data, 2025

Based on table .5 above, patients with Type 2 DM at the Kabila Health Center are dominated by patients who have suffered from DM for <5 years, which is 60.7%, followed by those who suffer from ≥ 5 years, which is 39.3%.

Family History of DM

The results of the research that have been carried out have obtained an overview of the frequency distribution of respondent characteristics based on family history of DM suffers from DM as follows.

Table 6 Distribution of Frequency Characteristics of Type 2 DM Sufferers at Kabila Health Center Based on Family History of DM

Family History of DM	Frequency (n)	Percentage (%)
Yes	38	67,9
No	18	32,1
Total	56	100,00

Source: Primary Data, 2025

Based on table 6 above, patients with Type 2 DM at the Kabila Health Center are dominated by patients who have a family history of DM as well, which is 67.9%, followed by those who do not have a family who suffers from DM, which is 32.1%.

Taking DM Medication

The results of the research that have been carried out have obtained an overview of the frequency distribution of respondent characteristics based on taking DM drugs as follows.

Table 7 Distribution of Frequency Characteristics of Type 2 DM Patients at the Kabila Health Center Based on Taking DM Drugs

Taking DM Medication	Frequency (n)	Percentage (%)
Yes	48	85,7
No	8	14,3
Total	56	100,00

Source: Primary Data, 2025

Based on table 7 above, patients with Type 2 DM at the Kabila Health Center are dominated by patients who take DM drugs, which is 85.7%, followed by those who do not take DM drugs, which is 14.3%.

Routinely Participating in Prolanis Activities

The results of the research that have been carried out have obtained an overview of the frequency distribution of respondent characteristics based on routine prolanis as follows.

Table 8 Distribution of Frequency Characteristics of Type 2 DM Patients at Kabila Health Center Based on Routine Follow-up to Prolanis

Regularly Participate in Prolanis	Frequency (n)	Percentage (%)
Yes	44	78,6
No	12	21,4
Total	56	100,00

Source: Primary Data, 2025

Based on table 8 above, patients with Type 2 DM at the Kabila Health Center are dominated by patients who routinely follow prolanis, which is 78.6%, followed by those who do not routinely follow prolanis, which is 21.4%.

Univariate Analysis

Level of Foot Care Knowledge in Type 2 DM Patients Before Being Given GMP Media Education

Based on the results of the research that has been conducted, an overview of the level of knowledge of foot care in patients with Type 2 DM before they are given foot care education through GMP media is as follows.

Table 9 Levels of Foot Care Knowledge in Type 2 DM Patients Before Being Given GMP Media Education

Level of Knowledge Before Being Educated	Frequency (n)	Percentage (%)
Good	0	0,0
Enough	36	64,3
Less	20	35,7
Total	56	100,0

Source: Primary Data, 2025

Based on table 9 above, the level of knowledge of foot care in patients with Type 2 DM at the Kabila Health Center before being educated through GMP media can be described as 36 patients with sufficient knowledge (64.3%), as many as 20 patients with insufficient knowledge (35.7%), and none of them are knowledgeable.

Level of Foot Care Knowledge in Type 2 DM Patients After Being Given GMP Media Education

Based on the results of the research that has been conducted, an overview of the level of knowledge of foot care in patients with Type 2 DM after they are given foot care education through GMP media is as follows.

Table 10 Levels of Foot Care Knowledge in Type 2 DM Patients After Being Given GMP Media Education

Level of Knowledge After Being Educated	Frequency (n)	Percentage (%)
Good	47	83,9
Enough	9	16,1
Less	0	0,0
Total	56	100,0

Source: Primary Data, 2025

Based on table 10 above, the level of knowledge of foot care in patients with Type 2 DM at the Kabial Health Center can be described after being educated through GMP media as many as 47 patients with good knowledge (83.9%), as many as 9 patients with sufficient knowledge (16.1%), and none with lack of knowledge.

Bivariate Analysis

The Effect of GMP Media Education on Increasing Knowledge of Foot Care for Type 2 DM Patients at the Kabila Health Center, Bone Bolango Regency

Bivariate analysis uses a paired sample t-test which compares the t-value of the t-count > the t-table or if the p value is < $\alpha(0.05)$ then H_0 is rejected and H_a is accepted. On the other hand, compare the t-value < t-table or if the p value is > $\alpha(0.05)$ then H_0 is accepted and H_a is rejected. The results of the bivariate analysis in this study are as follows.

Table 11 Test Paired Sample T-Test

Variable	N	df	Correlation	Mean Difference	t-count	T-Table	Sig.
Level of knowledge before education is provided – level of knowledge after education	56	55	0,506	-47,976	26,062	1,671	0,001

Source: Primary Data, 2025

Based on table 11 above, it shows that the results of the paired sample t-test with a p value of $0.001 < 0.05$ and a t-count value of $26.062 > t$ -table of 1.671 can be interpreted as H_0 rejected and H_a accepted or there is an effect of motion picture guidance media education on improving knowledge of foot care for people with type 2 diabetes mellitus at the Kabila Health Center, Bone Bolango Regency.

The average difference in the value of knowledge level before and after being given education was 47,976 which means that the value of the level of knowledge about DM foot care increased by 47,976 after being given education using GMP media. Meanwhile, the correlation value was obtained at 0.506 (adequate category) so that it is said that the influence of education using GMP media on the improvement of knowledge of DM foot care in the category of quite influential.

DISCUSSION

Level of Knowledge of Foot Care in Patients with Type 2 Diabetes Mellitus Before Being Given Media Guidance Motion Picture Education

Based on the results of the research that has been conducted, it can be described the level of knowledge of Type 2 DM sufferers at the Kabila Health Center about diabetic foot care before getting health education about diabetic foot care using GMP media. The results of the research that have been carried out have obtained the level of knowledge of foot care in patients with Type 2 DM at the Kabila Health Center before being educated through GMP media as many as 36 patients with sufficient knowledge (amounting to 64.3%), as many as 20 patients with insufficient knowledge (amounting to 35.7%), and none of them are knowledgeable.

The results of this study are in line with research by Chloranyta et al. (2024), where the level of knowledge obtained before being given foot care education interventions in Type 2 DM at the Gedong Air Health Center in Bandar Lampung is on average at a level of knowledge that is still relatively low. The results of this study are also in line with research by Rohmatulloh et al. (2024) which shows that the level of knowledge of type 2 DM sufferers in Cibolang Village, Cibolangkidul Health Center before being given health education is still said to be poor.

Knowledge is one of the main aspects that affect the emergence of an action. This ability is formed through the process of a person recognizing and understanding an object based on the results of the senses that he does (Octaviana & Hati, 2023).

Lack of knowledge about foot care in people with DM can increase the occurrence of serious complications. Most of the knowledge a person possesses is formed through information captured by the senses of sight and hearing. In addition, the understanding also develops from personal experiences and learning processes, both obtained through formal education and informal learning activities (N. M. S. H. Putri et al., 2023). Therefore, a person's level of knowledge is influenced by 2 factors, namely internal factors and external factors. Internal factors generally include education, type of work, and the age of the individual. Meanwhile, external factors are related to the environmental and social cultural conditions in which the sufferer lives that develop through first-hand experience (Chloranyta et al., 2024).

Based on the results of the analysis that has been carried out, it is seen from the age of Type 2 DM patients at the Kabila Health Center that the adult age group is more dominant at a sufficient level of knowledge, while the elderly age group is more dominant at a low level of knowledge. So that the older the

individual, the more mature the individual's thought process will develop.

These results are in line with the results of research by Chloranyta et al. (2024) where stating age is an important factor in shaping the level of individual knowledge. As people age, a person tends to experience increased cognitive and emotional maturity, so that the ability to think and understand information becomes better.

However, when individuals are 50-60 years old, the ability to work organs in the body is less efficient, one of which begins to experience a decline in intellectual function, including reduced memory skills and difficulties in processing and receiving new information (Rohmatulloh et al., 2024).

Based on the results of the analysis that has been carried out, it is seen that the tendency to increase the level of knowledge along with the increase in the level of education in patients with Type 2 DM at the Kabila Health Center.

These results are in line with the results of research by Rohmatulloh et al. (2024) Where formal education is one of the determinants of the formation of a person's knowledge, where a person with good knowledge is obtained from higher education compared to someone with low-medium education.

Furthermore, education level plays an important role in influencing an individual's ability to understand the information he or she receives. The higher a person's education, the easier it is for him to process and receive new knowledge, so his understanding tends to increase (Wibowo et al., 2023).

Based on the results of the analysis that has been carried out, it is seen from the work of Type 2 DM sufferers at the Kabila Health Center that individuals who have active and diverse work activities tend to be able to obtain sources of knowledge because they are directly exposed to a wider environment compared to individuals who work as IRTs and the informal sector. So that work can increase access and understanding of health information.

Work also contributes to a person's level of knowledge. Activities carried out in the world of work can enrich experiences and expand individual access to information. Through this routine, a person is encouraged to continue to develop his abilities and deepen his understanding (Wibowo et al., 2023).

A person who does not work will affect his ability to receive information due to the lack of activities he is engaged in so that his knowledge will be less sharpened. Especially in a person with IRT status, it can be related to a low level of knowledge about diabetic foot care due to limited access to health information sourced from formal education and the work environment. A more focused daily activity on domestic affairs has limited opportunities for IRTs to participate in health education, so the understanding of the importance of foot care, wound prevention, and the risk of diabetes complications is not optimal (Stars, 2024).

Based on the results of the analysis that has been carried out, it is seen that patients with DM for a long time at the Kabila Health Center show that patients with long suffering from DM <5 years show more dominance in sufficient knowledge because they are enthusiastic in digging up information about DM disease and treatments to prevent ulcers.

The results of this study are in line with research by Fajriyah et al. (2017) which reveals that patients who have suffered from DM for a long time <3 years have moderate knowledge about DM foot care which is because they have the motivation to try to find as much information about DM foot care as possible so that they can prevent unwanted DM ulcers from occurring.

However, it is inversely proportional to the results of research by Ginting et al. (2024) which reveals that in essence a person who suffers from DM >5 years including in a long period of time will have more experience in dealing with various conditions and complications related to the disease. On the other hand, patients who have suffered from DM for a long time <5 years are still classified as low experience in managing their disease.

The experience gained by a person will be a source of learning that then forms new knowledge. These experiences arise through an individual's interaction with his or her environment, either intentionally or unintentionally, and generally result in a change in behavior or understanding that is relatively sedentary (Chloranyta et al., 2024).

Based on the results of the analysis that has been carried out, it is seen from the history of families suffering from DM in Type 2 DM sufferers at the Kabila Health Center, it shows that having a family suffering from DM is a common condition in all respondents, both those who have sufficient knowledge and those who lack it.

In theory, the existence of a family history of DM can instill knowledge about diabetic foot care because this is obtained from the individual's experience in learning about DM disease and its treatment. Experiences are gained by individuals through the process of interaction with the environment, both intentional and unintentional, and can cause relatively permanent changes. Negative experiences tend to be avoided or forgotten, while positive and pleasant experiences will leave a deep psychological impression, make an emotional mark, and contribute to the formation of more positive attitudes in life. From the experience of caring for families who previously had DM wounds, it can shape the patient's knowledge in diabetic foot care (Chloranyta et al., 2024).

However, in line with the results of the study, it was seen that in the group of sufferers who lacked knowledge about DM treatment, most also had a family history of DM. This indicates that Even if a family member suffers from DM, if the sufferer does not understand that foot complications are a serious problem or does not know how to prevent them, then the experience in the family is not enough to form good foot care knowledge and behavior. Experiences without a proper medical understanding tend to be perceived only as "ordinary illnesses" and do not trigger a deeper search for information. In addition, if family members who suffer from DM do not do foot care properly or do not get adequate health education, then what the family members learn is wrong or incomplete behavior. As a result, even if there is a history of DM in the family, the information transferred can be inaccurate or very limited, so knowledge remains low (A. C. Putri, 2024).

Based on the results of the analysis that has been carried out, it is seen that taking DM drugs in patients with Type 2 DM at the Kabila Health Center shows that in patients who have sufficient knowledge and lack knowledge about foot care, DM is equally dominated by patients who take DM drugs.

These results are in line with those expressed by Tinuwo et al. (2025) that medication adherence is more influenced by medical needs or recommendations of health professionals, and is not entirely determined by the level of knowledge about diabetic foot care.

However, in line with the results of the study, it was seen that patients with sufficient knowledge about DM foot care were more dominant in taking DM drugs. This indicates that better knowledge tends to be associated with higher adherence in taking medications. This means that patients who have a better understanding of the treatment and complications of diabetes, including the risk of leg injuries, are more encouraged to follow medication therapy to keep blood sugar levels under control and prevent complications from occurring (Rudiyana, 2024).

Finally, based on the results of the analysis that has been carried out, it is seen from the routine participation in prolanis activities by Type 2 DM patients at the Kabila Health Center, showing that in patients who have sufficient knowledge and lack of knowledge about foot care, DM is both dominated by patients who routinely participate in prolanis activities.

The results of this study are in line with those expressed by Warti et al. (2022) That participation in Prolanis activities is often influenced by other factors such as the support of health workers, ease of access to services, invitations from health centers, and the need for routine check-ups, not solely by the level of knowledge.

Even so, individual compliance in participating in prolanis activities can have an impact on improving knowledge of treatment and prevention of chronic diseases such as DM. Individuals who regularly participate in prolanis activities can manage their health conditions including compliance with DM medication consumption, knowledge of DM foot care, and physical activity arrangements that can prevent complications from DM disease (Warti et al., 2022).

Level of Knowledge of Foot Care in Patients with Type 2 Diabetes Mellitus After Being Provided with Media Guidance Motion Picture Education

Based on the results of the research that has been carried out on the level of knowledge of foot care in patients with Type 2 DM at the Kabila Health Center after being educated through GMP media, as many as 47 patients are well-informed (83.9%), as many as 9 patients are sufficiently knowledgeable (16.1%), and none are knowledgeable.

The results of this study are in line with research by Chloranyta et al. (2024), where the value of the level of knowledge of foot care in Type 2 DM at the Gedong Air Health Center in Bandar Lampung is on average included in the category of good knowledge. This indicates that after being educated through audiovisual media, the level of understanding of foot care in type 2 DM has increased significantly.

The results of the research are also in line with the research by Setyorini et al. (2020), revealed that the level of knowledge about non-ulcer foot care in Type 2 DM patients after being given counseling using GMP media showed an increase in knowledge to reach the good category.

Providing education has a very important role and needs to be carried out on an ongoing basis. Health education is basically a learning process, where individuals, groups, and communities experience changes in attitudes and knowledge. The increase in understanding occurs because of the delivery of information that triggers the learning process in the education recipients (Rohmatulloh et al., 2024).

Individuals who receive education through the use of media or aids tend to be more aware of the stimuli given. This awareness then fosters an interest in observing and understanding the information conveyed. Video-based media or GMP can stimulate two senses at once (sight and hearing) which makes the process of storing information more effective, even retaining about 50% of the material learned (Setyorini et al., 2020).

The success of foot treatment in people with DM is greatly influenced by the level of knowledge that the patient has about the correct way of treatment. Therefore, the education provided needs to be specific and does not stop at the delivery of general information. Explanations of foot care measures should be emphasized in more detail, as the lack of affirmation can have an impact on the patient's low motivation to apply foot care

optimally (Sari et al., 2021).

Based on the results of the analysis, it was found that of the 47 patients who had good knowledge after being given education through GMP media, it was found that 36 patients were patients who had sufficient knowledge before being given education, and 11 patients were patients who had insufficient knowledge before being given education. Meanwhile, of the 9 patients who had sufficient knowledge after being given education through GMP media, they were patients who previously had a low level of knowledge.

This shows that patients with sufficient knowledge before being given education increase one level (to be good) after being educated through GMP media. Meanwhile, in patients with less knowledge before being given education, there are those who increase one level (to be sufficient) and those who increase two levels (to be good).

The results of this study are in line with those expressed by Sari et al. (2021) In increasing knowledge about diabetic foot care, it is necessary to consider the characteristic factors of the sufferer as well because the characteristics of the sufferer affect how the individual is able to receive and process information. Forms of education tailored to individual characteristic factors such as age, education, occupation, and pain experience can more effectively shape an understanding of proper foot care.

The Effect of Motion Picture Guidance Media Education on Increasing Knowledge of Foot Care for Patients with Type 2 Diabetes Mellitus at the Kabila Health Center, Bone Bolango Regency

Based on the results of the research that has been conducted, by using the paired sample t-test with a p value of $0.001 < 0.05$ and a t-count value of $26.062 > t\text{-table of } 1.671$, it can be interpreted that H_0 is rejected and H_a is accepted or there is an effect of motion picture guidance media education on improving knowledge of foot care for patients with type 2 diabetes mellitus at the Kabila Health Center, Bone Bolango Regency.

The results of this study are in line with research by Setyorini et al. (2020), which revealed that there was a significant influence of foot care education through GMP media on knowledge of non-ulcer foot care in patients with Type 2 DM at the Loceret Health Center. Research by Rohmatulloh et al. (2024) also revealed that the use of video Health Education can affect the knowledge of foot care for DM patients in Cibolang Village.

The average difference in the value of knowledge level before and after being given education was 47,976 which means that the value of the level of knowledge about DM foot care increased by 47,976 after being given education using GMP media. This is in line with the theory by Notoatmojo in (Rohmatulloh et al., 2024) Where it is explained that education is a learning process that brings about changes in individuals, groups, and society. A person is said to have learned when there is a shift in understanding in him, for example from not knowing to understanding, so as to produce meaningful changes.

Providing education through video/GMP media featuring a series of foot care steps has been proven to help people with Type 2 DM more easily understand the material presented. The use of this media is also able to increase the interest and awareness of Type 2 DM sufferers to the importance of foot care. In addition, the provision of videos/GMP in the form of files that can be copied to the patient's mobile phone provides additional benefits, as it allows them to study the material independently outside of face-to-face sessions (Setyorini et al., 2020).

Furthermore, judging from the difference in the level of knowledge about foot care for Type 2 DM patients at the Kabila Health Center, which is quite large after being educated using GMP media, it shows that video media can effectively be used as an educational medium.

The use of audiovisual media in the health education process provides advantages because information is conveyed through a combination of images and sounds that are received simultaneously through the senses of sight and hearing. This more lively presentation makes the material more interesting and able to increase the interest and involvement of respondents when receiving information, thus having an impact on increasing their understanding and knowledge (Chloranyta et al., 2024).

The effectiveness of education differs according to the type of media used. Information delivered only through visuals is generally remembered by about 10% by the recipient. If education is delivered through audio, the memory rate increases to about 20%. However, when the material is presented in an audiovisual manner that involves hearing and vision as well as the target memory can reach approximately 30% (Rohmatulloh et al., 2024).

CONCLUSION

Based on the results of the research that has been conducted, it can be said that there is an influence of Guidance Motion Picture media education on improving knowledge of foot care for people with type 2 diabetes mellitus at the Kabila Health Center, Bone Bolango Regency with a p value of $0.001 < 0.05$.

ADVICE

Advice for DM sufferers to be more active in using GMP media as a guide for self-care at home. GMP media about diabetic foot care can be accessed at any time via the internet.

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