Proceeding of The International Conference on Health Sciences (TICHes)
Vol 3, No 3 (2024) Print ISSN 9772722511 Online ISSN 3026-3689

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THE INFLUENCE OF HEALTH COUNSELING USING VIDEO MEDIA ON DIABETES MELLITUS KNOWLEDGE LEVEL IN KERTASARI HEALTH CENTER, BANDUNG

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ABSTRACT

The number of diabetes mellitus (DM) sufferers has increased every year both in Indonesia and throughout the world, this will have an impact on the health of diabetes mellitus sufferers namely occurrence of complications. Diabetes mellitus can be prevented through promotive and preventive measures to prevent complications, one of which is by health education with video media. The purpose at the stady is to determine the effect of health education with video media on the level knowledge of diabetes mellitus at the Kertasari Public Health Center, Bandung Regency. The method of this study was pre-experimental research with a one group pretest-posttest design. The sample is 16 respondents with accidental sampling technique. The results show the knowledge of the respondents before conducting health education using video, all respondents namely 16 people (100.0%) had less knowledge about diabetes mellitus, and the result was that after health education using video almost entirely respondents or 15 people (93.8%) level knowledge is good, and only a small portion, namely 1 person (6.2%) level knowledge is enough and no one (0%) is less knowledgeable about diabetes mellitus. Statistical test results Marginal Homogeneity obtained a p value of 0.000 <0.05, so it can be concluded that there is an influence of education using video media on increasing knowledge of diabetes mellitus at the Kertasari Public Health Center, Bandung Regency. It is suggested that this video media can be used as a tool in providing education to patients in efforts to prevent and reduce the number of diabetes mellitus..

Keywords: Diabetes Mellitus, Health Education, Knowledge, Video Media.

INTRODUCTION

International Diabetes Federation (IDF) organization estimated that at least 463 million people aged 20-79 years in the world suffered from diabetes in 2019, or equivalent to a prevalence rate of 9.3% of the total population of the same age. Based on gender, IDF estimates that the prevalence of diabetes in 2019 is 9% suffered by women and 9.65% suffered by men. The prevalence of diabetes is estimated to increase as the population ages to 19.9% or 111.2 million people aged 65-79 years. The predicted number will continue to increase until it reaches 578 million in 2030 and 700 million in 2045. The Southeast Asian, specificcaly Indonesia is ranked the 3rd with a prevalence of 11.3%. IDF also projects the number of diabetes sufferers in the population aged 20-79 years in several countries in the world, which has identified 10 countries with the highest number of sufferers. China, India and the United States occupy the top three positions with the number of sufferers at 116.4 million, 77 million and 31 million. Indonesia is ranked the 7th among the 10 countries with the highest number of sufferers, which are 10.7 million. (Indonesian Republic, 2006) (Indonesian Ministry of Health, 2022)

The prevalence of DM (Diabetes Mellitus) in Indonesia according to statistical reports (Indonesian Ministry of Health, 2018) based on doctors' diagnoses estimated that at least in the

population aged ≥ 15 years has increased from 1.5% in 2013 to 2.0% in 2018, province with the highest prevalence is DKI Jakarta. West Java Province ranked the sixteenth position in Indonesia with DM sufferers with a prevalence of 1.7%. Based on the 2020 Bandung Regency health profile, it is estimated that at least 235,828 people aged 15 years and over suffered from DM in 2018 or equivalent to a prevalence rate of 8.5% (Bandung District Health Service, 2020). DM is included in the top 10 most common diseases at Kertasari Health Center with a total of 200 cases in the age range 30-65 years. The Kertasari Community Health Center is in Cibeureum Village, Kertasari District, Bandung Regency, the majority of the community earns their living as vegetable farmers.

The early detection of DM carried out by the Kertasari Community Health Center through health education using leaflets as a media, but the number of DM was still not decreasing. Another effort was carried out, which is regular blood sugar screening through POSBINDU PTM (Integrated Development Post for Non-Communicable Diseases). Several efforts have been made by the Bandung District Health Service to improve health services for DM sufferers, for instance, advocacy with various stakeholders in order to fulfill budgets and human resources, socialization of health services to DM sufferers through coaching and training of health workers in the context of increasing health service competency, community empowerment through various health promotion activities and collaborating with FKTL (advanced level health facilities) which are competent in handling case referrals. (Bandung District Health Service, 2020)

Based on research conducted by (Sayekti, 2019) with the title "The Influence of Health Education using Video Media on Knowledge, Attitudes and Behavior to Prevent Diabetes Mellitus in Mangunsoko Village, Dukun Sub-District, Magelang District" obtained the results that Knowledge has increased by 23.8, Attitudes have increased by 42.8, and Behavior has increased by 16.7, so it can be concluded that there is an influence of health education using video media on knowledge, attitudes and behavior to prevent diabetes mellitus. According to research conducted by (Prasetyo, 2021) entitled the influence of health education media through regional language videos on the level of knowledge of diabetes mellitus sufferers in Sawangan Village, Magelang Regency, with the conclusion that there is an influence of health education media through regional language videos on the level of knowledge of diabetes mellitus diet in Sawangan Village, Magelang Regency.

METHOD

Research design used was pre-experimental with one group pretest-posttest design. The sampling technique used accidental sampling with a total of 16 respondents. The inclusion criteria in this study were: Type 1 and type 2 DM patients, aged >17 years, able to read and write, able to communicate well. Exclusion criteria are diabetes patients with physical limitations, patients with mental/emotional and cognitive disorders, patients with chronic complications, metabolic disorders that can interfere with and hinder research. Data analysis used was the marginal homogeneity test.

RESULT

Frequency Distribution of Knowledge Level of Diabetes Mellitus Patients Before Being Given Health Education through Video Media at the Kertasari Community Health Center, Bandung Regency

	Frequency	Percentage

Less	16	100,0
Average	0	0,0
Good	0	0,0
Result	16	100

Frequency Distribution of Knowledge Level of Diabetes Mellitus Patients After Being Given Health Education through Video Media at the Kertasari Community Health Center, Bandung Regency

	Frequency	Percentage
Less	0	0,0
Average	1	6,2
Good	15	93,8
Result	16	100

Frequency Distribution of Knowledge Level of Diabetes Mellitus Patients After Being Given Health Education through Video Media at the Kertasari Community Health Center, Bandung Regency

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Frequency Distribution of Knowledge Level of Diabetes Mellitus Patients After Being Given Health Education through Video Media at the Kertasari Community Health Center, Bandung Regency

		Knowledge After Health Education			Total	P*
		Less	Average	Good		
Knowledge Before Health Education	Less	0	1	15	16	0,000
	Average	0	0	0	0	
	Good	0	0	0	0	
T o t a l		0	1	16	16	

DISCUSSION

Based on table 3, the marginal homogeneity statistical test results show that the value of $p = 0.000 < \alpha$ (0.05), so there is a significant influence of health education using video media in increasing knowledge of diabetes mellitus at the Kertasari Community Health Center, Bandung Regency. Video media in this study was considered more effective as a health education medium compared to leaflets and lectures, because the presence of audio visuals increased respondents' attention and paid attention to the information presented so that it could be well received (Mahendra, Jaya and Lumban, 2019). In this study, there was 1 respondent who had sufficient knowledge, as health workers, especially those at the Kertasari Community Health Center, could continue to utilize the educational video media that had been created by researchers as a medium for providing health education about DM in collaboration with prolanis cadres to help spread the video via social media, namely the WhatsApp group. This effort can help increase public knowledge, especially DM sufferers, and reduce the increase in the number of DM sufferers. Video media can be used in Community Health Centers, especially prolanis classes and can be used as a first step to broaden the insight of DM patients, and can be played on promotional media provided by Community Health Centers, namely TV so that they can be watched and played repeatedly.

After being given treatment in the form of health education using video media, the knowledge of DM sufferers changed because respondents were able to see and hear well the content that was shown in the video. This increase was also influenced by the respondents' good understanding of the material for the ongoing counseling activities. This is in line with what was explained by (Notoadmodjo, 2018) that audiovisual education strategies are media that stimulate the senses of hearing and sight during the educational process. This media provides a stimulus for hearing and vision so that the results obtained are maximized. The results of this study are in line with research (Anggraini, Hariyanto and Warsono, 2018) which found that there were differences in the level of knowledge about DM before and after being given education using audiovisual media in type II diabetes mellitus sufferers. It is hoped that an increase in knowledge can change behavior for the better, in this case behavior is all human activities or actions, both those that can be directly observed and those that cannot be observed by outside parties.

The average characteristics of respondents in this research were workers, dominated by 5 housewives and 11 farmers. Activity is one of the pillars of DM management which can contribute to managing DM and preventing complications. Self-care management of DM consists of regular diet, physical activity or physical exercise, monitoring blood glucose levels,

foot care and pharmacological therapy or medication (Soelistijo et al., 2019). Efforts to bring changes in behavior to make it better, go through several stages such as knowledge, attitude and practice, so before respondents adopt a behavior they must first know what the benefits are. Research conducted by (Feni Salsabila, Ismonah, 2021) revealed that audiovisual education can improve self-care management with a p value of 0.001 (<0.05).

CONCLUSIONS AND SUGGESTIONS

All respondents, which consist of 16 people (100%), had poor knowledge of diabetes mellitus patients before being given health education using video media at the Kertasari Community Health Center, Bandung Regency.

Almost all respondents, which consist of 15 people (93.8%), had good level of knowledge of diabetes mellitus after being given health education using video media at the Kertasari Community Health Center, Bandung Regency.

There is a significant effect of health education using video media on the level of knowledge of diabetes mellitus at the Kertasari Community Health Center, Bandung Regency, with a p value = 0.000 at a significance level of 0.05.

Video media made for this research (https://youtu.be/aQFxO6E_8L0?si=Vk5qr-DHHeoplQbB) can be used as a media in providing education to patients in efforts to prevent and reduce the number of diabetes mellitus.

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