



The Application of Booklet as The Effort to Prepare Type 2 Diabetes Mellitus Patient in Facing New Normal Era During Covid-19 Pandemic



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Abstract

The corona virus disease pandemic has caused public health emergencies around the world. The risk, severity and mortality of this disease have been associated with chronic non-communicable diseases such as diabetes mellitus. This community service activity was carried out in September 2020. The activities were taken place in the patient's house directly (door to door). The activities were done by providing health education to people with diabetes both with and without wound complications. The respondent was 10 people. The media used booklet. Since the activity was done during the Covid-19 pandemic, both the implementing activities and the targets complied the health protocols to prevent Covid-19 transmission. The data obtained showed that the knowledge of the respondents about Covid-19 and the New Normal Era before being given health education using the booklet method was only 1 respondent had good knowledge (10%). After being given health education using the booklet method, the respondent's knowledge data about Covid-19 and the New Normal Era increased into 6 respondents (60%) had good knowledge. Booklet is one of model or media to convey health messages in the form of a book, either in writing or in pictures. Booklet has many advantages such as easy to make, can be simply made at a relatively low cost, and clients can study independently.

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INTRODUCTION

Situation Analysis

On March 11, 2020, the World Health Organization (WHO) declared the outbreak caused by the novel coronavirus (SARS-CoV-2), the 2019 corona virus disease (Covid-19), as a pandemic. The coronavirus disease pandemic has caused public health emergencies around the world. Disease risk, severity and mortality have been associated with chronic non-communicable diseases such as diabetes mellitus. The accumulated evidence has caused great concern in countries with a high prevalence of such morbidity (Pititto & Ferreira, 2020).

The corona virus pandemic caused by SARS-CoV-2 (a disease known as COVID-19) has infected more than 1 million people from various backgrounds around the world. Current data in Indonesia also shows an increasing trend. The disease is relatively new, has a rapid course and is highly contagious, but most of its properties are still not understood. Research on this virus is also still ongoing, especially to find out the most appropriate treatment to overcome it (Perkeni, 2020).

Covid-19 can affect almost all ages, however the data currently available show that the elderly and people who have a history of chronic disease (co-morbid) are at risk of getting it more frequent and with worse complications. The history of chronic diseases includes hypertension, diabetes mellitus, cardiovascular disease and chronic lung disease. Especially for patients with diabetes mellitus, it is the second most common co-morbidity found, which is about 8% of cases after hypertension, and with a death rate three times that of patients in general (7.3% versus 2.3%) (Perkeni, 2020). Diabetic patients are reported to have increased susceptibility to fatal COVID-19 infection, including a high risk of being admitted to an intensive care unit with respiratory failure and septic complications (Mirabelli et al., 2020).

The causes of the poorer prognosis in people with diabetes tend to be multifactorial, thus reflecting the syndromic nature of diabetes. Age, gender, ethnicity, co-morbidities such as hypertension and cardiovascular disease, obesity, and pro-inflammatory and pro-coagulation states may all be associated with a worse risk. Glucose-lowering agents and antiviral treatments can modulate the risk, but the limitations of their use and potential interactions with COVID-19 treatments must be carefully reviewed. Finally, the corona virus infection causes severe acute respiratory syndrome which can worsen diabetes because it can trigger acute metabolic complications through a direct negative effect on Beta cell function, causing diabolic ketoacidosis (Apicella et al., 2020). Associated with the global prevalence of diabetes which affecting more than 450 million people worldwide and still increasing, the emerging covid-19 crisis is a serious threat to the population with diabetes (Mirabelli et al., 2020).

The new normal scenario has been echoed in all sectors in providing freedom of economic and social activities with disciplined application of strict health protocols. When the Covid-19 case shows a decreasing trend for some time, people can carry out activities while maintaining strict health protocols, including using masks, washing hands frequently with soap, using hand sanitizers, maintaining a physical safe distance, checking body temperature, and covering mouth and nose when coughing or sneezing. This is to avoid the occurrence of the second wave and subsequent waves which are more dangerous, deadly, and paralyze the National Health Service system (Yuningsih, 2020).

Health promotion as the main pillar of health development which put the community as the subject of change can be optimized as the effort to increase the readiness of the community to face the new normal era (Yuningsih, 2020). One of the health promotion activities is health education. Participants could have better understanding of health education by the help of the media. One of the media that can be used in health education is a booklet. Booklet is a book that contains pictures and is equipped with words that describe the picture. The use of health education media includes not only written messages but also images to facilitate understanding of messages (Wulandari, 2018).

The problems that arise above are both a challenge and an opportunity for STIKes Patria Husada Blitar. Through the community service activities, STIKes Patria Husada Blitar is expected to be able to contribute to solve health problems that have continued to develop until now, especially the problem of diabetes mellitus in the era of the Covid-19 pandemic. Based on the background above, the community service team of STIKes Patria Husada Blitar was interested in conducting community service activities with the title "Booklet Application in an Effort to Prepare Type 2 Diabetes Mellitus Patients to Live a New Normal Era during the Covid-19 Pandemic"

METHODS

Time and Place

This community service activity was carried out in September 2020. The activities were carried out in the patient's house.

Method

The activity was done by coming into patients' house door to door. The activities carried out were providing health education to diabetics patients both with and without wound complications. The respondent was 10 people. The media used a booklet. The time of the implementation of the service to the community was still by complying the health protocols to prevent Covid-19 transmission such as by wearing masks, washing hands and maintaining distance.

The schedule of the activities was as follows:

1. Determining the respondent. Respondents for community service activities were patients managed by one of the lecturers of STIKes Patria Husada Blitar.

2. Conducting an assessment of the risk factors for Covid-19 using the Covid-19 Risk Self-Assessment instrument (Kemenkes RI, 2020). Respondents who were involved in these activities were based on the results of the assessment of the risk factors for Covid which had low risk level
3. Completing the demographic data questionnaire
4. Filling the pre-test questionnaire about Covid-19 and health protocol in the new normal era.
5. Providing health education about Covid-19 and health protocols in the new normal era.
6. Filling the posttest questionnaire about Covid-19 and health protocol in the new normal era. The questionnaire used in this community service activity was an instrument made by the service provider which was taken from various reliable sources.

RESULTS

The respondents' characteristics in the community service activity could be seen in the table below:

Table 1. The respondents' characteristics

Respondents' characteristics		(f)	%
Age	36 – 45 years old	1	10
	46 – 55 years old	2	20
	56 – 65 years old	6	60
	>65 years old	1	10
		10	100
Gender	Male	6	60
	Female	4	40
		10	100
Educational background	Primary school	2	20
	Secondary school	8	80
		10	100
Occupation	Unemployed	10	100
	Employed	0	0
		10	100
Time of DM suffer	1 – 5 years	8	80
	> 5 years	2	20
		10	100
Information on Covid-19	Yes	10	100
	No	0	0
		10	100
Informants	Mass Media	6	60
	Health care provider	3	30
	Family	1	10
	Neighbors		
		10	100
Information on new normal era during Covid-19 pandemic	Yes	6	60
	No	4	40
		10	100

Table 2. The risk of Covid-19 of the respondents based on the self-assessment

Covid-19 Risk		
Category	(f)	%
Low risk	10	100
Medium risk		
High risk		
	10	100

Table 3. Knowledge of Covid-19 and New Normal Era before given the booklet of health education

Category	(f)	%
Good	1	10
Fair	6	60
Poor	3	30
	10	100

Table 4. Knowledge of Covid-19 and New Normal Era after given the booklet of health education

Kategori	(f)	%
Good	6	60
Fair	4	40
Poor	0	0
	10	100

DISCUSSION

Based on the data obtained, it could be seen that the knowledge of respondents about Covid-19 and the New Normal Era before being given health education using the booklet method, it was found that only 1 respondent had good knowledge (10%). While the data of the knowledge of respondents about Covid-19 and the New Normal Era after being given health education using the booklet method, it was found that 6 respondents (60%) had good knowledge. It can be concluded that there was an increase in respondents' knowledge after being given health education using the booklet method about Covid-19 and the New Normal Era.

This result was in line with Arifki Zainaro, (2018) who stated that there was an increase in knowledge after being given health education with booklet media on primary and secondary prevention of Coronary Artery Disease (CAD). This was also confirmed by Sari's research (2019) on the effectiveness of booklet and leaflet media on the knowledge of young women about the impact of teenage pregnancy. The results of this study indicated that booklets and leaflets had an influence in increasing adolescent knowledge about the impact of pregnancy on adolescents. Booklets were more effective than leaflets in increasing knowledge of young women about the impact of adolescent pregnancy in Pertiwi Private High School, Jambi City.

Models and visual aids were very helpful for the target students in receiving information based on the ability of sensory capture. The more senses used the better the target acceptance of health education messages or materials. Booklet is one of the props or media to convey health messages in the form of books, both in the form of writing and pictures (Sari, 2018). Booklets media have the advantage that clients can adjust from independent study, users can see during their leisure time, information can be shared with family and friends, easy to make, reproduce, repair and easy to adjust, reduce the need for note-taking, can be made simply with relatively low cost durable, wider capacity, can be directed at certain segments (Arifki Zainaro, 2018)

Covid-19 or Corona virus can attack almost all ages, but current data shows that the elderly and people who have a history of chronic disease (co-morbid) have a risk of getting it more frequently and with worse complications from the disease. One of the chronic diseases is diabetes mellitus (PERKENI, 2020)

The most effective preventive action in the community includes: (1) performing hand hygiene using a hand sanitizer if the hands do not look dirty or washing hands with soap if the hands look dirty, (2) avoiding touching the eyes, nose and mouth, (3) applying coughing ethic when coughing or sneezing by covering the nose and mouth with the inner upper arm or tissue, then throwing the tissue into the trash, (4) wearing a medical mask if you have respiratory symptoms and performing hand hygiene after removing the mask, (5) maintaining minimum distance (1 meters) of a person experiencing respiratory symptoms. This preventive action must always be carried out by all circles of

society, especially in the face of the new normal era (Ministry of Home Affairs Work Team Support Covid-19 Task Force, 2020).

The new normal era is a scenario to accelerate the handling of Covid-19 in the health and socio-economic aspects. New normal is a step to accelerate the handling of Covid-19 in the health, social and economic sectors. The new normal scenario is carried out by considering regional readiness and the results of epidemiological research in the related area. The World Health Organization (WHO) provides several indicators that are required to be complied with by all countries in the world including Indonesia in order to adjust their normal life. These indicators are not increasing transmission or expanding transmission or as much as possible reducing transmission, using health system indicators, namely how high the adaptation and capacity of the health system can respond to Covid-19 services, surveilans, namely a way to test a person or group of people whether they have the potential to have Covid- 19 or not and a massive test was carried out (Children's Health Installation Team, 2020). What needs to be encouraged in an effort to prevent the spread of Covid-19 is by providing health education to the public. One of the media that can be used for the implementation of health education is a booklet.

THE APPLICATION OF BOOKLET AS THE EFFORT TO PREPARE TYPE 2 DIABETES MELLITUS PATIENT IN FACING NEW NORMAL ERA DURING COVID-19 PANDEMIC



Figure 1. The application of booklet as the effort to prepare type 2 diabetes mellitus patient in facing new normal era during covid-19 pandemic

CONCLUSION

Based on the discussion above, it could be concluded that:

Booklets media had the advantage such as clients could adjust their independent study, users could see during their leisure time, the information could be shared with family and friends, easy to make, reproduce, repair and easy to adjust, reduce the need for note-taking, could be made simply with relatively low cost durable, wider capacity, could be directed at certain segments.

Booklet media was effectively proven in increasing the knowledge on Covid-19 and New Normal Era on diabetes mellitus patients.

SUGGESTION

1. People with co-morbid diseases have a higher effect if exposed to Covid-19.
2. Health protocols to prevent the spread of Covid-19 must always be implemented in every social life.
3. Other educational media such as videos and others can be used in health education activities about Covid-19 and the New Normal Era.

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