

The Role Of Health Education Program Health Program Toward Knowledge Of DHF In Kedurahan Sananwetan Blitar City

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ABSTRACT

Dengue hemorrhagic fever (DHF) is an infectious disease by dengue virus that is transmitted through the bite of the *Aedes Aegypti* mosquito, characterized by sudden high fever accompanied by manifestations of bleeding and tends to cause shock and death. The design of this research is quantitative pre-post experimental research with one group pre-test and post-test design. The focus of the research is to analyze health education on the role of health education program at the health center on the knowledge of DHF in Gedog District Sananwetan District, Blitar City before and after the intervention. Total population of 50 respondents with Simple Random Sampling technique and obtained a sample of 44 respondents. The results showed that the majority of respondents had less knowledge in the health category before being given the health education program at the puskesmas program with 24 respondents (54.5%). While the majority of respondents had sufficient knowledge in the category after being given the health education program at the puskesmas program by 21 respondents (47.7%). The Wilcoxon analysis results show that the p-value of 0,000 <0.05 then H0 is rejected so it is concluded that there is an influence of health education in the health center program on DHF knowledge in Gedog Village, Sananwetan Sub-District, Blitar City. With these results it is expected that respondents will conduct monitoring in places that would be mosquito habitat, after that bury items that can become puddles, then drain the tub and close the water reservoirs. Besides that, don't forget to sprinkle the abate on the well. Respondents can also prevent 4M Plus so that mosquitoes cannot breed around our homes.

Keywords : Dengue Fever, Health Education & Knowledge

INTRODUCTION

Dengue hemorrhagic fever (DHF) is an infectious disease by dengue virus that is transmitted through the bite of the *Aedes Aegypti* mosquito, characterized by sudden high fever accompanied by manifestations of bleeding and tends to cause shock and death. This disease is one of the important public health problems in the world in general and Indonesia in particular and often causes an outbreak of an extraordinary event (KLB) with a high number of deaths (DepKes RI, 2004).

The occurrence of DHF outbreaks was signaled because the vector population of *Aedes aegypti* mosquitoes is increasing, this mosquito is an insect that always causes problems for humans, its role as a vector carrying disease can cause serious problems (Handayani, 2007). This disease attacks all age groups, but the majority are children aged 15 years and under (Ministry of Health Republic of Indonesia, 2011).

According to the World Health Organisation (WHO) the incidence of dengue worldwide has increased dramatically over the past 20 years, estimated the number of people at risk of developing this disease is around 2.5 - 3 billion and 20 million each year. Indonesia is a region that has the potential for dengue infection (Depkes, 2018).

According to Indrawati (2010) the number of dengue cases in Indonesia continues to increase and is spreading widely, interspersed with outbreaks in the range of 5-6 years. In 2010, there were about 150,000 cases with a death rate of 1,317 people. Whereas DHF cases

in Central Java in the same year occurred as many as 16,858 cases. With a death rate of 230 people.

In Indonesia in 2018 until the first week of 2019, the highest number of DHF cases was in East Java, with 700 DHF suspects. Blitar City is an area in East Java which has 3 subdistricts and 21 villages in 2017 where there were 146 dengue cases and 3 people were declared dead due to DBD (Blitar City Health Office). One of the sub-districts in Blitar City, Gedog Village, occupies the highest position in 2018 DHF cases, with 45 suspected DHF and 56 with dengue fever. Gedog Village is one of the villages in Sananwetan Subdistrict which is endemic to DHF.

Based on the results of a preliminary study conducted by researchers in Gedog Village, Sananwetan Sub-District, Blitar City, to 50 cadres, it was found that there were only 10 respondents who knew of dengue fever (DHF). And based on the results of observations and interviews of cadres in the Gedog Village by researchers, most cadres in the Gedog Village Sananwetan Sub-District Blitar City did not know in detail the causes of DHF and its prevention. The cadres also did not understand how to manage if there were dengue cases in the region, where cadres did not understand the eradication of mosquito nests (PSN) that must be done and how to do it.

Based on AI an area can be categorized as high, medium and low risk, namely high risk if $AI > 55$ per 100,000 population, moderate risk if $AI 20-55$ per 100,000 population and low risk if $AI = 15$ years. Looking at this data the possibility of transmission is not only at home but at school or at work. So that the PSN movement also needs to be promoted at school and at work. It seems that there has been a change in the pattern of dengue fever, where in the past DHF was a disease in children under 15 years, now it has attacked all age groups, even more at productive ages. Further research needs to be done to influence it, whether because of an increasingly virulent virus (malignant) or because of other influences. Eradication of mosquito nests (PSN) is the key to success in deciding the spread. But in general people do not understand correctly the prevention and control of the problem of dengue. Therefore, providing information related to prevention and repetition is still needed (Liliweri, 2007).

One method of health education is through peer education, which is a form of education carried out by peer education. Peer educators in the mosquito nest eradication program (PSN) are people who become resource persons (trainers) for groups of their school-age peers who have attended educational training peers PSN. Peer education should be school children who are active in learning activities in the classroom, for example schoolchildren who excel. Peer educators can bring changes in knowledge and behavior in their peer groups. Peer educators become the method of choice in addressing information because peer educators use more or less the same language, so the information conveyed is easily understood by peer groups (Simamora, 2009).

METHODS

The design of this research is quantitative pre-post experimental research with one group pre-test and post-test design. The focus of the research is to analyze health education on the role of health education program at the health center on the knowledge of DHF in Gedog District Sananwetan District, Blitar City before and after the intervention. Total population of 50 respondents with Simple Random Sampling technique and obtained a sample of 44 respondents.

RESULT

Characteristics of Subjects

Table 1. Characteristics of Respondents Based on gender, occupational education and knowledge before and after health education is given about DHF.

No	Characteristics	ΣN	Σ%
1	Gender		
	Man	12	41
	Female	32	59
2	Education		
	Elementary school	5	11
	Middle school	12	27
	High school	20	46
	University	7	16
3	Occupational		
	Civil servants	6	14
	entrepreneur	23	52
	Farmers	5	11
	Not working	10	23
4	Knowledge (before)		
	Good	6	13,6
	Enough	14	31,8
	Less	24	54,5
5	Knowledge (after)		
	Good	20	45,5
	Enough	21	47,7
	Less	3	6,8
	Total	44	100

DISCUSSION

A. Knowledge of DHF before being given health education in the Gedog area of Sananwetan sub-district, Blitar City

The results showed that the majority of respondents had less knowledge in the category of preventing mosquitoes from breeding before being given health education programs at the puskesmas program as many as 24 respondents (54.5%). In addition, a number of 14 respondents (31.8%) had sufficient knowledge in the category. While a total of 6 respondents (13.6%) had knowledge in either category.

Knowledge is the result of human sensing or the result of knowing someone about objects through their senses. By itself at the time of injury so as to produce that knowledge is strongly influenced by the intensity of attention and perception of objects (Notoatmodjo, 2013). Maximum knowledge here is about dengue fever.

Dengue hemorrhagic fever (DHF) is an infectious disease caused by dengue virus with clinical manifestations of fever 2-7 days, muscle pain and / or joint pain accompanied by leukopenia, rash, lymphadenopathy, thrombocytopenia and hemorrhagic diathesis (Suhendro, 2009).

Not all infected with dengue virus will show severe DHF manifestations. There are only mild fever manifests that will heal by itself or even some with no symptoms of pain (asymptomatic). Some will suffer from dengue fever which does not cause plasma leakage and result in death (RI Ministry of Health, 2013). The typical case of DHF is characterized by

four major clinical manifestations: high fever, hemorrhagic phenomena, and often hepatomegaly and circulatory failure. Moderate to real thrombocytopenia with concurrent hemoconcentration, is a special clinical laboratory finding of DHF. The main pathophysiological changes that determine the severity of the disease in DHF and what distinguishes it from DD are plasma seepage as manifested by an increase in hematocrit (hemoconcentration, serous effusion or hypoproteemia).

According to researchers knowledge is very important to support something that someone wants to do to be more focused and have good goals. In fact, if someone does not have a good knowledge of something, then that person will ignore it even though it is good if done. Based on the results of the study in getting knowledge about dengue hemorrhagic fever (DHF) in respondents tended to be lacking, it was caused by the lack of information obtained through print media, electronic media and from health workers. In addition, lack of knowledge is also caused by the lack of desire of respondents to find out about dengue hemorrhagic fever (DHF), so in addition to external factors also due to internal factors or from the respondents themselves.

B. Knowledge of Dengue Fever After Providing Health Education in Gedog District, Sananwetan District, Blitar City

The results showed that the majority of respondents had sufficient knowledge in the category after being given health education at the puskesmas program by 21 respondents (47.7%). In addition, 20 respondents (45.5%) had knowledge in both categories. Whereas 3 respondents (6.8%) had insufficient knowledge.

Health education in the sense of education. in general, any planned effort to influence other people, whether individuals, groups, or the community, so that they do what is expected by education practitioners or health promotion. And this limitation implies input elements (targets and educators from education), processes (planned efforts to influence others) and outputs (doing what is expected). The expected outcome of a health promotion or education is health behavior, or behavior to maintain and improve health that is conducive to the goals of health promotion. (Notoadmojo, 2012).

This mass approach method is suitable for communicating health messages addressed to the public. So that the objectives of this method are general in the sense that they do not distinguish between age groups, sex, occupation, socioeconomic status, education level, etc., so that the health messages to be conveyed must be designed so that they can be captured by the masses. Health promotion on this factor intends to conduct training for religious leaders, community leaders, and health workers themselves with the aim that the attitudes and behavior of officers can be an example, example or reference for the community about healthy living (Green, 2010).

Health promotion influences several factors causing the formation of these behaviors according to Notoadmojo (2012) Health promotion aims to upload awareness, provide or increase public knowledge about health care and improvement for himself, his family and his community. Besides that, in the context of health promotion it also provides an understanding of traditions, community trust and so on, both those that harm and those that benefit health. This form of health promotion is done so that the community can empower the community to be able to provide health facilities and infrastructure by providing capabilities by means of technical assistance, providing direction, and ways to find funds for the procurement of facilities and infrastructure.

According to researchers, given education or direction through health education about dengue hemorrhagic fever (DHF) can increase one's knowledge to be even better where someone will become aware of everything related to dengue hemorrhagic fever (DHF). Based on the research results obtained by respondents after being given health education the level of

knowledge has increased, where the most increase is in the knowledge of how to eradicate mosquito nests (PSN) where a person must drain the tub, cover everything that is made into water storage, bury items that are can be a puddle of water and monitor where the mosquito aides aygepty develops. It also installs mosquito nets while sleeping. In the study, there were also those who were not affected by health education. One of the respondents' ignorance was in preventing mosquitoes from breeding. Where respondents still don't understand about 4M Plus and how to do it.

C. The Influence of the Role of Health Education in the Puskesmas Program on the Knowledge of Dengue Fever in the Gedog District of Sananwetan District, Blitar City

Based on the results of the Wilcoxon analysis showed that a p-value of 0,000 <0.05 then H_0 was rejected and H_1 was accepted so it was concluded that there was an influence of health education in the health center program on DHF knowledge in Gedog Village, Sananwetan District, Blitar City.

Based on the cross tabulation, it is known that the majority of respondents who were previously given health education in the category of less increased after being given health education as many as 21 respondents (47.7%). In addition, a number of 14 respondents (31.8%) experienced an increase from before being given health education in the sufficient category to a good category after being given health education. In addition, a number of 6 respondents (31.8%) were stagnant from before being given health education in the good category but still in the good category after being given health education. Likewise, a number of 3 respondents (6.8%) were stagnant in the category of lacking knowledge before and after being given health education.

Dengue hemorrhagic fever (DHF) is an infectious disease by dengue virus that is transmitted through the bite of the *Aedes Aegypti* mosquito, characterized by sudden high fever accompanied by manifestations of bleeding and tends to cause shock and death. This disease is one of the important public health problems in the world in general and Indonesia in particular and often causes an outbreak of an extraordinary event (KLB) with a high number of deaths (MOH RI, 2004).

The occurrence of DHF outbreaks was signaled because the vector population of *Aedes aegypti* mosquitoes is increasing, this mosquito is an insect that always causes problems for humans, its role as a vector carrying disease can cause serious problems (Handayani, 2007). This disease attacks all age groups, but the majority are children aged 15 years and under (Ministry of Health Republic of Indonesia, 2011).

In order to improve the health status, efforts must be made comprehensively in the form of promotive, preventive, curative and rehabilitative. According to Notoatmodjo (2010) health promotion for health problems is determined by two main factors, namely behavioral and non-behavioral factors (physical, social, economic, political, and so on). For behavioral factors, efforts can be made through education approaches. In the context of fostering and enhancing public health behaviors, the educational approach (health education) is more appropriate because education is an effort for people to behave or adopt health behaviors by persuasion, persuasion, appeals, invitations, providing information, giving awareness and so on. Thus health education strives for the behavior of individuals, groups, or the community is very important to continue to do because it has a positive influence on the maintenance and improvement of health (Notoatmodjo, 2010).

Health education has been proven to be able to increase the level of knowledge of a person before receiving health education the level of knowledge is still lacking whereas after being given health education the level of knowledge has significantly improved to be good. This proves that there is an influence of the health education program at the health center on

the knowledge of DHF in Gedog Village, Sananwetan District, Blitar City. Of the various factors that affect increasing knowledge, health health through discussion and counseling is an effective way and can be done at any time to the community to be aware of the danger of dengue fever (DHF) as well as how to cope with the disease.

CONCLUSION

1. Most respondents had less knowledge in the category before being given health education at the puskesmas program by 24 respondents (54.5%). In addition, a number of 14 respondents (31.8%) had sufficient knowledge in the category. While a total of 6 respondents (13.6%) had knowledge in either category.
2. Most respondents had sufficient knowledge in the category after being given health education at the puskesmas program by 21 respondents (47.7%). In addition, 20 respondents (45.5%) had knowledge in both categories. Whereas 3 respondents (6.8%) had less knowledge in the category of preventing mosquitoes from breeding by means of 4M Plus.
3. There is an influence of health education in the health center program on the knowledge of dengue fever in Gedog Village, Sananwetan District, Blitar City.

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