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The difference of mosquito eradication activities through health education with leaflet medium and bondres dance in the vocational school of Mengwi village, Mengwi Subdistrict, badung regency 2018

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ABSTRACT

Badung Regency is included in the three regencies in Bali which have the highest number of DHF cases. The number of cases in 2015 was 2178 with 6 deaths with IR of 0,3% and as of the end of July 2016 the number of cases was 2751 with 10 fatalities with IR of 0,4%. Whereas for Mengwi Village in 2015, it had the highest number of cases in Mengwi Subdistrict, Badung Regency, with 109 cases out of 632 sufferers in Mengwi Subdistrict. Housewives as their care giver, they are tasked with looking after, caring for, treating family members when suffering from illness. Yet with the dual task of housewives, it is not easy for them to prevent disease. The purpose of the study was to find out the increase in measures to eradicate mosquito nests by housewives before and after health education using leaflet medium through the bondres dance in Mengwi Village, Mengwi District, Badung Regency

This study is experiment with pre-test and post-test control group design. The sample came from the population of housewives in Mengwi Village, Mengwi District, Badung Regency. The sample calculation obtained was 332 people.

The sample technique was by using systematic random sampling. Data collection technique was with a questionnaire by data collection officers. Data collection on eradication of mosquito nests actions was carried out before treatment and one week after treatment. Data analysis uses paired t-test and independent t-test statistics with the help of computer.

There was an increase in the score of the mosquito nests eradication action control group by 0,12 (2,74%) with a sign of 0,000 while the leaflet through the bondres dance treatment group showed that the mosquito nests eradication action score showed an increase in the action score of 2.64 (59.19%) with a sign of 0,000. Obtained differences in mosquito nests eradication actions after health education through leaflet medium and leaflet medium through bondres dance in Mengwi Village, Mengwi District, Badung Regency with a sign of 0,000.

Keywords: Mosquito nests eradication action, Leaflet, Bondres Dance

PREFACE

Dengue fever is an infectious disease caused by a virus. Various types of viruses are known to cause dengue fever, but in Indonesia, there are only two types of viruses that cause dengue fever, namely dengue virus and chikungunya virus Misnadiarly (2009). DHF disease is seasonal, which is common in the rainy season which allows mosquitoes to transmit Aedes aegypti and Aedes albopictus viruses. Aedes aegypti and Aedes albopictus live in stagnant clean water. DHF mosquitoes are domestic mosquitoes that are found mainly in dense locations of the population in urban environments. The DHF mosquito control program is focused on 3M plus, which includes draining and closing water reservoirs, removing used goods such as tires or cans that can hold standing water and the use of mosquito larvae repellent (temephos) or fish-eating larvae in household water containers [12].

Results of research by Suyasa, et al (2017) [3] regarding the relationship between knowledge and attitudes of national health insurance with the act of eradicating mosquito nests (PSN) and the incidence of DHF in Badung Regency, obtained the result that there is a negative relationship between the actions of mosquito nests eradication with the incidence of DHF. Community mosquito nests eradication actions in Badung Regency out of 330 respondents 203 (61.52%) were classified as not good. mosquito nests eradication actions have a significant role in the incidence of DHF in Badung Regency, the worse the mosquito nests eradication actions, the DHF case in Badung Regency are increasing.

Disease prevention, treatment and rehabilitation efforts always involve housewives. In the community, housewives are positioned as care givers. That is, they are tasked with looking after, caring for, treating family members when suffering from illness [4]. Yet with the dual task of housewives, it is not easy for them to prevent disease. The task of housewives to maintain family and community health apart from requiring time, energy, money, also requires skills [5]. Family health care skills are influenced by one's knowledge and experience. Those who have a lot of knowledge will be more skilled than the less. Thus knowledge will influence how women treat themselves and their families in relation to illness [6].

According to lecturing method is good for both highly educated and low-educated targets. One example is counselling through bondress dance. The method of giving lectures is the same as giving usual lectures only with a different look, where in giving lectures or counselling through Bondres dance delivers the material by inserting jokes and other entertainment so that people are more enthusiastic to hear and understand the health messages given by bondres dancers [8].

Experience can be gained through health education or health counselling. One way to increase the participants' listening to counselling is through the Bondres Dance with leaflet medium. Bondres Art is a traditional art that combines drama, dance and singing into a unique performance with a comedy theme. Bondres dance is much loved by the public, especially people in Bali, therefore the selection of Bondres dance with leaflet medium for health promotion is an appropriate way because Bondres art emphasizes more on the nature of humour or jokes and satire which contains the meaning of giving moral ethics message, and full of information Bali Post, 2016 [9]. The actions of housewives are related to eradicating mosquito nests that still not enough need health education through counselling. One of the counselling was done through a bondres dance performance with leaflet medium.

Research Methodology

This type of experimental research with Pre-test and Post-test Control Group Design. In this design, there are two groups chosen randomly, then measured the mosquito nests eradication action pre-test and post-test between the experimental group and the control group [10]. The experimental group was given health education with leaflet medium through bondres dance while the control group was only given leaflet medium.

The research population is housewives in the Mengwi Village, Mengwi District, Badung Regency. According to Sugiyono (2011) [11], sample is part of the number and the characteristics possessed by the population. If the population is large, and researchers may not study everything in the population, then researchers can use samples taken from the population. The sample size uses the Slovin formula [12]. Obtained a sample of 331 halved for control and treatment groups, each group totalling 165,5 people, rounded off to 166 people,

so the total number of samples for the two groups totalled 332 people. How to take samples in this study was The sampling technique used in this study was systematic random sampling technique.

Primary data collection techniques regarding the characteristics of respondents and mosquito nests eradication actions using a structured questionnaire by trained data collectors/surveyors. Data collection on mosquito nests eradication actions was carried out before treatment and one week after treatment. Data analysis uses paired t-test and independent t-test statistics with the help of a computer [13].

RESEARCH RESULT

Research Subject's Characteristics

Age and education

Based on the results of the study, obtained an average age of the research subjects in the control group of 43, 10 years. In the control group, the minimum age of research subjects is 21 years and the maximum research subject is 75 years old. As for the treatment group, the average age of the research subjects was 43,19 years, the minimum age of the research subjects was 22 years and the maximum was 70 years. After interviewing 166 research subjects each in the control and treatment groups, the highest education was obtained in the control group was 94 people (56,63%) senior high school while in the highest education group also 93 people (56,02%).

Occupation

The results of interviews using questionnaires to 166 research subjects in each control and treatment group obtained the distribution of research subjects based on occupation as follows:

Table 1: Distribution of Research Subjects by Occupation Year 2018

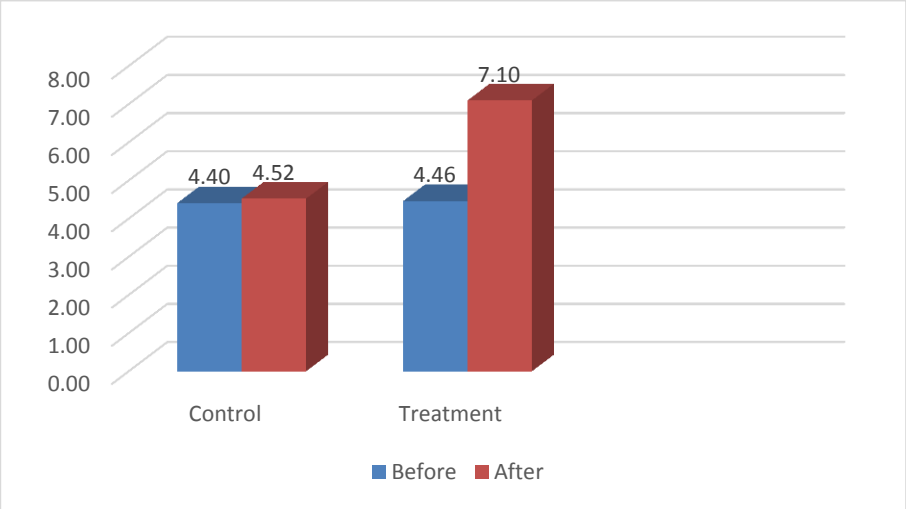
Occupation	Control		Treatment	
	Frequency	Percentage	Frequency	Percentage
Public servant	8	4.82	10	6.02
Private company worker	26	15.66	24	14.46
Entrepreneur	24	14.46	19	11.45
Housewife	108	65.06	113	68.07
Total	166	100	166	100

Based on Table 1, the research subjects showed the most occupation is as housewives in the control group of 108 (65.06%) and 113 in treatment groups (68.07%). The level of occupation shows the role of mothers is very important in environmental cleanliness

Variable Description and Data Analysis

Variable Description

Based on the results of the study obtained an average score of housewives' mosquito nests eradication action in the control group before being given leaflet was 4,40 ± 0,60. The average score of housewives' mosquito nests eradication action after giving leaflets was 4,52 ± 0,60. Whereas in the group before treatment by giving leaflet through bondres dance, the average score of housewives' mosquito nests eradication action was 4,46 ± 0,64, and after treatment by giving leaflet through bondres dance, the average score of housewives' mosquito nests eradication action was 7.10 ± 0,76, the increase in the mean score of housewives' mosquito nests eradication action can be seen in the following graph.



Graphic 1

The Average Mosquito Nests Eradication Action Score of Housewives Before and After in the Control and Treatment Group in Mengwi Village, Mengwi District Badung Regency in 2018

Looking at the graph above, there is an increase in the score of housewives' mosquito nests eradication action in the control group by 0,12 (2,74%) while in the leaflet through bondres dance treatment group, the scores of housewives' mosquito nests eradication action showed an increase in action scores of 2, 64 (59,19%).

Data Analysis

The data normality test uses the Kolmogorov Smirnov test for the variable of the housewives' mosquito nests eradication action before and after both in the control group and the treatment group, the results of all data distribution variables are not normally distributed with sign 0,000. To find out the differences before and after the next treatment using non-parametric t-test, namely Wilcoxon and Mann Witnhey.

Based on the results of the Wilcoxon statistical test for the control group, the result of the sign of 0,000 shows that there are differences in the housewives' mosquito nests eradication action before and after from the control group. For the treatment group, the result of sign 0,000 obtained means that there are differences in the housewives' mosquito nests eradication action before and after from the treatment group.

To find out the effectiveness of the actions of housewives' mosquito nests eradication with health education leaflet through bondres dance, the Mann Witnhey test obtained results for the housewives' mosquito nests eradication before control and before the treatment obtained a sign of 0,506 showed no difference in the actions of housewives' mosquito nests eradication before either on control and treatment groups. While the average results of the actions of housewives' mosquito nests eradication after the control group and after the treatment group obtained a sign of 0,000, this means that there are significant differences in the actions of housewives' mosquito nests eradication after the control group and after the treatment group. These differences indicate health education with leaflets through the bondres dance is very effective in increasing the actions of housewives' mosquito nests eradication in Mengwi Village, Mengwi District, Badung Regency.

DISCUSSION

The results showed a difference in the score of housewives' mosquito nests eradication action between before and after the provision of health education by leaflet medium through the bondres dance with sign 0,000. Difference in increase by score of housewives' mosquito nests eradication action by 2,64 (59,19%). This shows that the provision of health education through leaflet medium through bondres dance can improve the behaviour of housewives' mosquito nests eradication in the context of overcoming dengue fever in Mengwi Village, Mengwi District, Badung Regency 2018.

Changes in a person's behaviour can occur through education or health promotion. This begins with the provision of health information. Providing

information about how to prevent disease, how to care for health, how to carry out mosquito nests eradication actions and so on will increase public knowledge about it. Health education will produce effective changes if done through certain methods. Action is an attitude that has not been realized in an action (overt behaviour). Realizing the attitude of real action required supporting factors or situations that allow and in practice have levels, namely, perception, guided response, mechanism, and adoption [7].

Research conducted by Lontoh, R.Y, A. J. M., et al (2016) [14], where respondents with good knowledge scores can influence the taking of actions for the proper prevention of DHF. Likewise, the value of good actions will affect the taking of appropriate DHF prevention measures. This can make an increase in the value of respondents' precautionary measures about DHF after being given counselling through Bondres because changes in a person's actions occur due to changes in the respondent's perception to choose an object in connection with the action to be taken [7].

The results of this study are in line with the research conducted by Maria Ratih Widiyaning, Syamsulhuda B.M., Bagoes Widjanarko (2018) [15] about Factors Related to Prevention of Dengue Hemorrhagic Fever Prevention by Housewives in Doplang Village Purworejo obtained the result that there was a relationship between family support and DHF prevention practices in Doplang Village, Purworejo. Family support, especially housewives, is considered very important by family members in terms of decision making to take DHF prevention measures.

Likewise, the research related to health education conducted by Itrat *et al*.(2008) [16] meneliti 16 examined the knowledge of attitudes and behaviours related to DHF in Pakistan and found that the most important and useful source of information about DHF was television. Students who received counselling about mosquito nests eradication through lecture and film methods had a significantly increased knowledge compared to before counselling [17].

Health education with leaflet through bondres dance is very effective in increasing the actions of mosquito nests eradication housewives. According to Notoatmodjo (2003), the lecture method is the most commonly used method for group health education with a target of more than 15 people for high and low educated targets, where the key to success is if the lecturer has mastered the material and the use of assistive devices or media that is suitable both printed and electronic media. Bondres is an art of dance and mask drama accompanied by gambong gongs. The method of counselling through Bondres is a combination of the method of direct extension and methods based on the senses of the recipient of information.

According to Andersen, Medaglia, and Henriksen dalam Haryani, et al (2016) [18], direct health counselling methods in the form of discussions, panels, brainstorming, demonstrations, simulations, role playing etc. which are carried out directly between instructors and participants (face to face) both one way or two directions have advantages for participants because they can directly show expression during the process and immediately can be seen the ability of skills, and demanded activity from the participants. Direct counselling requires additional media such as handouts or audio-visual media to be able to assist in the learning process.

According to Notoatmodjo (2010) [10], that a person can learn through his five senses. Someone can have information about health education about DHF can use the senses of hearing 11% and the highest is if someone can use the sense of sight that is equal to 83%. Someone who can remember the learning outcomes well and can use the senses of more than one of the five senses through what they see and hear by 50%. Health education through bondres dance is counselling that uses more than one of the five senses, both the sense of sight, the senses of hearing and at the same time the bondres dancer also performs dance movements that demonstrate the action of mosquito nests eradication, the DHF. In the extension activities, the performance of the Bondres emphasized more on the nature of humour and innuendo which contained the meaning of giving a moral and information-laden ethic message. In addition, Bondres is much favoured by the community, especially in Bali.

CONCLUSION

The conclusions in this study include an increase in measures to eradicate mosquito nests housewives before and after health education with leaflet medium, an increase in measures to

eradicate mosquito nests housewives before and after health education with leaflet medium through bondres dance. There is no difference in measures in housewives' mosquito nests eradication action before health education through leaflet media with leaflet media through bondres dances and there are differences in the housewives' mosquito nests eradication action after health education through leaflet medium with leaflat medium through bondres dances.

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