



The Influence Of Knowledge Level And Attitude On The Event Of Dengue Hemorrhagic Fever (Dhf) In Wera District In 2020

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Abstract

In 2020, Bima District through the Health Service determined Dengue Hemorrhagic Fever (DHF) as one of the diseases that fall into the category of Extraordinary Events (KLB). Bima Regency can also be said to be one of the dengue endemic areas in West Nusa Tenggara Province. This study aims to determine the effect of the level of knowledge and attitudes on the incidence of Dengue Hemorrhagic Fever (DHF). The study was conducted in Wera District, the area that has the highest number of cases of Dengue Hemorrhagic Fever in Bima District. The number of DHF cases reported in the working area of the Wera Health Center was 44 cases and

1 person died. The research design used in this study was Case Control, data collection was carried out by distributing questionnaires and processed using Chi Square through univariate and bivariate methods. The results of the study obtained an influence on aspects of the level of knowledge and attitudes of the community towards the incidence of Dengue Hemorrhagic Fever in Wera District. The P-value of the knowledge level variable is 0.001, and the attitude is 0.033 (p value < 0.05). The influence of the attitude aspect towards the incidence of DHF in Wera District is caused by the lack of knowledge of the people in the area about the DHF disease.

Keywords: Dengue Hemorrhagic Fever, Knowledge Level, Attitude

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Introduction

Dengue Hemorrhagic Fever (DHF) is still one of the endemic diseases in Indonesia and even the world. Even the WHO in 2020 in an article entitled Dengue and Severe Dengue said the increase in dengue cases was very dramatic to date. Many cases are found with symptoms that are still relatively mild so that they have the potential to go unreported, thus affecting the lack of data recorded by related parties. Gubler(1998) estimates Vector mosquitoes have spread in the tropics for more than 200 years (WHO, 2020).

A modeling research by Bhatt S, et al in 2013 showed a figure of 390 million dengue virus infections per year (95% credible at intervals of 284-528 million), and 96 million (interval 67-136 million) had clinical indications.(WHO, 2020).

In 2020 there are still many countries that report an increase in the number of dengue cases, namely Bangladesh, Brazil, Ecuador, India, Cook Islands, Indonesia, Mauritania, Maldives, Mayotte(Fr), Singapore, Nepal, Sudan, Sri Lanka, Timor Leste, Thailand and Yemen(WHO, 2020).

In Indonesia, the development of dengue cases is still quite high, this is influenced by increased mobility and population density. Until July 2020, the Indonesian Ministry of Health recorded 71,633 cases of dengue fever reported throughout Indonesia. From this data, there are 10 provinces that are reported to have the highest number of cases, namely West Java 10,722 cases, Bali 8,930 cases, Java TAge 5,948 cases, NTT 5,539 cases, Lampung 5,135 cases, DKI Jakarta 4,227 cases, NTB 3,796 cases, Central Java 2,846 cases, DIY 2,720 cases, and Riau 2,255 cases. In addition, the Ministry of Health also released as many as 459 deaths due to dengue throughout Indonesia (Kemenkes, 2020).

The Bima District Health Office in 2020 recorded as many as 143 DHF cases reported, and 2 of them died. One person died in Wera District, which is also the sub-district area with the highest cases, and 1 other person in Monta District as the area with the second highest case of 21 cases. This later became one of the reasons for the Bima District Health Office to determine DHF as one of the diseases that was included in the Extraordinary Event category (Bima District Health Office, 2021). Many factors



can influence, including knowledge and behavior factors.

In a study conducted in the District of Medan Marelan, one of the causes of the increasing number of dengue cases is the lack of good attitude from the surrounding community in preventing dengue fever. So that items that have the potential to cause puddles around residents' homes are often left alone (Ade Pryta S, 2018).

In another study conducted in Banjar Badung, Melinggih Village, Payangan Health Center Area, it was found that the level of education, knowledge about dengue hemorrhagic fever, and attitudes that support PSN behavior were significantly related to PSN behavior, where the higher the level of education, the better knowledge about fever. bloody and with an attitude that supports PSN, the correct PSN behavior will be carried out.

Method

The design used in this study is Case Control. The research respondents were 88 people, consisting of 44 people who were DHF sufferers in 2021 and 44 other people as control respondents who had no history of being DHF sufferers. This research was conducted in the Wera Health Center Work Area, Bima Regency from April to May 2021. Data collection was carried out by distributing research questionnaires. Research questionnaires were distributed to each case and control respondent. The collected data was then analyzed using univariate and bivariate methods using Chi Square. Univariate analysis aims to explain the frequency distribution of each of the variables studied. While bivariate analysis aims to determine the relationship between the independent variable and the dependent variable.



RESULTS

Knowledge level

Table 1. Community Knowledge

		Respondent Status		Total
		Case	Control	
Knowledge	Not good	31	14	45
		35.2%	15.9%	51.1%
	Well	13	30	43
		14.8%	34.1%	48.9%
Total		44	44	88
		50.0%	50.0%	100.0%

Table 2. Risk of DHF

Value	95% Confidence Interval	
	Lower	Upper
Knowledge (Poor good / Good)	5,110	2.064 12,651
Respondent = Case	2,279	1.389 3,737
Respondent = Control	,446	,277 ,719
Total	88	

Based on the data above, it can be explained that as many as 45 people have poor knowledge, consisting of 35.2% of the case group and 15.9% of the control group. 43 people with good knowledge, consisting of 14.8% of the case group and 34.1% of the control group. The results of statistical tests using the Chi Square test with a significant level of 5% (0.05), p value = 0.001 95% (CI = 2.064-12.651) when compared with the degree of significance ($p < 0.05$) it can be stated that there is a relationship between meaning between knowledge and the incidence of dengue fever. The results of the Odds Ratio are known that people with poor knowledge have a risk of 5,110 times to get dengue fever than people who have good knowledge.



Attitude

Table 3. Community Attitude

		Respondent Status		Total
		Case	Control	
Attitude	Not good	26	11	37
		29.5%	12.5%	42.0%
	Well	18	33	51
		20.5%	37.5%	58.0%
Total		44	44	88
		50.0%	50.0%	100.0%

Table 4. Risk of DHF

	Value	95% Confidence Interval	
		Lower	Upper
Odds Ratio for Behavior (Not Good / Good)	4,333	1,746	10,758
Respondent = Case	1,991	1,300	3,050
Respondent = Control	,459	,269	,785
Total	88		

Based on the data above, it can be explained that as many as 41 people have a bad attitude, consisting of 29.5% of the case group and 17.0% of the control group. 47 people with a good attitude, consisting of 20.5% of the case group and 33.0% of the control group. The results of statistical tests using Chi Square with a significant level of 5% (0.05), obtained p value = 0.033 95% CI = 1.175-6.638 when compared with the degree of significance ($p < 0.05$) it can be stated that there is a significant relationship between attitudes with dengue fever. The results of the Odds Ratio are known that people with a bad attitude have a risk of 4,333 times affected by Dengue Fever than people who have a good attitude.



DISCUSSION

The Effect of Knowledge on the Incidence of DHF

Public knowledge about a disease, especially about control will affect the incidence of a disease. Supported by good knowledge, it will be able to minimize the growth of a disease. Likewise, what happened to the growth in the number of Dengue Fever disease that occurred in Bima Regency, especially Wera District. Based on the researcher's observations, there are still many affected households who are not good enough or lack knowledge about the disease. Based on the results of calculations carried out using Chi Square, it can be said that people with a low level of knowledge have a higher risk of developing Dengue Fever than people with good knowledge. This is in line with the results of previous research conducted in the city of Bandung which stated that household knowledge of vector control had an influence on the incidence of dengue fever in the area (Prasetyowati, 2018). Poor knowledge often causes people to carry out activities that without them knowing it can be the source of a disease such as Dengue Fever. In an effort to handle Dengue Fever, the Bima District Government has done many things, especially the prevention and control of DHF at Wera Health Center such as conducting socialization, but the level of knowledge of the individual community also affects the accuracy of receiving and



reasoning information. People with a better level of knowledge will also make independent efforts in terms of seeking information, both in terms of prevention and control. In this study, many people with poor knowledge levels still do not understand how to give first aid to sufferers. The level of knowledge also affects the pattern of community prevention in disease prevention efforts. People with good knowledge can be said to prioritize preventive measures or preventive efforts. Meanwhile, people with a low level of knowledge will find it difficult to understand the importance of preventive efforts in overcoming a disease.

The Effect of Attitude on the Incidence of DHF

A person's attitude or behavior is closely related to knowledge, belief. Knowledge of good value will produce a good attitude as well. Behavior is part of the environmental element and affects the incidence of DHF indirectly (Ministry of Health, 2019). A person's attitude is also a factor that also influences the development of dengue cases in Bima Regency, especially Wera District. After doing Chi Square analysis, it can be stated that there is an influence of attitude on the incidence of Dengue Fever. People with a bad attitude have a higher risk of getting dengue fever. Things that can affect people's attitudes in this study are the daily activities of respondents who are mostly outside the home. So that the attitude of the community towards the condition of the environment in which they live also has an effect. Items that have the potential to become a breeding ground for larvae are not given much attention. The habits of some breeders who still carry out activities in the yard or under stilt houses can affect the presence of mosquitoes. This is evidenced by the presence of several cases found in households that have livestock activities in their yards. A similar study conducted in Jepara District, Jepara Regency also said that there was a significant relationship between community behavior towards the incidence of DHF with the results of the calculation of OR 3,912 (Zulmi, 2015). Another similar study was conducted in Pekanbaru City. Unfavorable behavior carried out by the community and affecting the incidence of DHF is the habit of hanging clothes. The study said that the risk of people who have the habit of hanging clothes is 6.29 times greater for dengue fever



(Yunita, 2012).. The active behavior of the community voluntarily is needed in helping to maintain environmental cleanliness, especially in implementing PSN behavior (Mosquito Nest Eradication) (Parulian, 2016).

The attitude that is also often found in the Wera District area related to Dengue Fever is the lack of fast response from sufferers and their relatives in terms of first aid. So that many cases of DHF that are handled are classified as severe and at risk of being fatal.

CONCLUSION

From the results of this study, it was concluded that the level of public knowledge of Dengue Hemorrhagic Fever (DHF) in Wera District was still lacking. In fact, there are still many people who do not know for sure about this disease, both in terms of type, causes, prevention, first aid, and efforts to overcome it. The lack of community knowledge has caused people's attitudes to be very lacking in implementing good prevention patterns. There are still many people who carry out livestock business around their homes, which is also one of the factors causing the emergence of vector breeding sites. So that in Wera District in 2020 there are still many cases of dengue fever which even caused 1 person to die.

SUGGESTION

Further research needs to be done in more depth related to the factors that can affect the level of public knowledge of dengue disease. The community also still needs intensive coaching to foster community motivation so that they can assist prevention and control efforts independently and quickly. For people who have livestock businesses, it is still very necessary to be given a deeper understanding so that they no longer carry out activities that can cause mosquito breeding places around their living environmen.



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