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The Relationship between Environmental Sanitation and the Presence of the Dengue Fever Vector Dengue Fever (DBD) in the Working Area of the Subdistrict Community Health Center Medan Polonia

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ABSTRACT

One of the environmental-based diseases is Dengue Hemorrhagic Fever (DHF), which is currently a public health problem. Dengue Hemorrhagic Fever is an infectious disease which is currently a public health problem which often becomes an Extraordinary Event (KLB). To find out the relationship between environmental sanitation and the presence of Dengue Hemorrhagic Fever (DHF) vectors in the work area of the Medan Polonia District Health Center. This research is quantitative research using the Descriptive Correlation method. Using a cross sectional study approach. The sample size in this study was 146 people from a population of 230 people. The sample in this study was obtained using a simple random sampling technique. data collection method using a questionnaire. Univariate analysis uses descriptive statistical tests to obtain an overview. The results of this study show that the proportion of clean water supply incidents with the presence of vector (DBD) is (63.7%). Condition of hangers or piles of cloth with the presence of vector (DBD) (58.9%). Condition of water reservoirs with the presence of vector (DBD) (63.7%). Condition of trash cans with the presence of vector (DBD) (63.7%). The condition of the presence of pots/containers with the presence of Dengue Hemorrhagic Fever (DHF) vectors (63.7%). The related statistical test result is that the condition of the hanger or pile of cloth with the presence of vector (DBD) has a value of (p = 0.004). Water reservoirs with the presence of vector (DBD) have a value of (p = 0.009). The condition of the trash can with the presence of vector (DBD) has a value of (p = 0.015). The presence of pots/containers with the presence of vector (DBD) has a value of (p = 0.005). Through the results of the analysis, it can be concluded that there is a significant relationship between the condition of hangers or piles of cloth, water reservoirs, the condition of rubbish bins and the presence of pots/containers with the presence of vectors (DBD) in the Medan Polonia health center working area. It is recommended that the community health center, village midwife and community collaborate to improve environmental hygiene and health.

Keywords:
Provision of Clean Water, Hangers or Piles of Cloth, Water Storage Places, Condition of Trash Cans, Presence of Pots/Containers

INTRODUCTION

Cases of Dengue Hemorrhagic Fever (DHF) in Medan Polonia are still a big concern, especially for researchers, considering that the incidence of this disease continues to increase. Apart from that, not all people have early awareness of Dengue Hemorrhagic Fever (DHF), which can result in death. There has been an increase in the number of cases of Dengue Hemorrhagic Fever (DHF), the number of sufferers tends to increase and the spread is becoming wider.

One of the environmental-based diseases is Dengue Hemorrhagic Fever (DHF), which is currently a public health problem. The transmission of Dengue Hemorrhagic Fever (DHF) can be influenced by environmental factors, the condition of a house also influences the spread of Dengue Hemorrhagic Fever (DHF). Dengue Hemorrhagic Fever is an infectious disease that is currently a public health problem which often becomes an Extraordinary Event (KLB) due to the rapid spread of this disease and the potential to cause death. (Sucinah W., Tri Wahyuni S./Indonesian Environmental Health Journal 18(1), 2019

From data from the Central Statistics Agency (BPS) in 2019, Medan Polonia District has data on 57,682 people. The number of Dengue Hemorrhagic Fever (DBD) cases is the highest after Medan Namorambe (IR Incidence Rate or morbidity rate of 20 people), Medan Sibiru-biru (IR Incidence Rate or morbidity rate of 18 people), Medan Patumbak District (IR Incidence Rate or morbidity rate of 11 people), Medan Deli Tua (IR Incidence Rate or morbidity rate 13 people). Medan Polonia District (IR Incidence Rate or morbidity rate of 30 people).

The Aedes Aegypti mosquito has a habit of resting inside the house or sometimes outside the house, which is close to its breeding place. Usually in a dark and damp place. Mosquito Nest Eradication (PSN) is a method of vector control as one of the efforts made to prevent the transmission of Dengue Hemorrhagic Fever (DHF). The Mosquito Nest Eradication Campaign (PSN) has been promoted by the government, in this case the Department of Health, with the 3M motto, namely: Regularly draining water reservoirs, closing water reservoirs and burying used items that can become mosquito nests. This activity has now developed into 3M plus, namely 3M activities are expanded by changing the water in flower vases, bird drinkers or other similar places once a week, repairing water channels and gutters that are not running smoothly, sprinkling larvicide powder, raising larvae-eating fish, installing wire mesh, providing lighting and ventilation in the room. adequate (ME R : ME, n.d.).

3M Plus activities have also been expanded by efforts to increase the community's habit of using mosquito nets when taking naps, using medicine that can prevent mosquito bites, and avoiding the habit of hanging clothes indoors at home. In every health problem, including efforts to control Dengue Hemorrhagic Fever (DHF), behavioral factors always play an important role. Attention to behavioral factors is as important as attention to environmental factors, especially in terms of disease prevention efforts. Apart from activities to eradicate mosquito nests, other vector control efforts to prevent the incidence of Dengue Hemorrhagic Fever (DHF) are carried out by avoiding contact with adult mosquitoes.

Dengue Hemorrhagic Fever (DHF) has a very fast course and is often fatal because many patients die due to late treatment. Dengue viruses of various serotypes are now endemic in many tropical countries. Community knowledge, attitudes and behavior regarding prevention in general are still lacking. According to basic understanding, people's

behavior can be explained as a person's response to stimulus or stimulation related to illness and disease, the health service system, food, and the environment.

Human responses or reactions, both passive (knowledge, perception and attitudes), the physical environment such as settlements, water supply infrastructure, vegetation and seasons greatly influence the availability of breeding habitat and growth of Dengue Hemorrhagic Fever (DHF) disease vectors. The Aedes Aegypti mosquito as a residential mosquito has its main habitat in artificial containers in residential areas.

Based on secondary data that I obtained from the Medan Polonia health center in September-December 2020, there were 30 cases of Dengue Hemorrhagic Fever (DBD) where Dengue Hemorrhagic Fever (DBD) is an infectious disease caused by the dengue virus and transmitted by the Aides mosquito. Aegypti.

METHOD

This research is quantitative research using the Descriptive Correlation method. Using a cross sectional study approach. The aim is to determine the relationship between environmental sanitation and the presence of the Dengue Hemorrhagic Fever (DHF) vector in the work area of the Medan Polonia District health center in 2021. The population in this study were 230 people aged 17 to 30 years who visited the Medan Polonia District health center. The sample size in this study was 146 people from a population of 230 people. In this research, the sampling technique used was simple random sampling technique

Method of collecting data

Primary data is data obtained directly from the community health center by distributing questionnaires to respondents. Secondary data in this research was obtained through reports and documents from medical records in the work area of the Medan Polonia District Health Center.

Table 1. Operational Definitions

No	Variable	Operational Definition	Measuring instrument	Measuring scale	Measuring results
1.	clean water supply	Lack of concern from local residents regarding provision waterclean	Questionnaire 6 question	Nominal Does not meet the requirements (score 0-2). fulfill i condition (score 3-6)	1. Yes 2. No
2.	Hanger or pile of cloth	People's habits of hanging or stacking cloth with dengue fever	Questionnaire 4 question	Nominal Does not meet all requirements (score 0-1). Menu hi terms (score 2-4)	1. Yes 2. No
3.	Water reservoirs	Water reservoir used	Questionnaire 6	Nominal Not eligible	1. Yes 2. No

No	Variable	Operational Definition	Measuring instrument	Measuring scale	Measuring results
		by residents for activities every day must be in good condition closed, water sanitation maintained, draining water to keep away the Aedes aegypti mosquito do not develop breed in it.	question	(score 0-2). Qualified (score 3-6)	
4.	Rubbish bin	The trash cans used by residents meet sanitation hygiene requirements.	Questionnaire 8 question	Nominal a. Does not meet the requirements (score 0-3). b. Menu hi terms (score 4-8)	1. Yes 2. No
5.	The presence of pots/containers	Starting from the cleanliness of the surrounding area, as well as the cleanliness of the place where unused items are stored in a closed place.	Questionnaire 6 question	Nominal a. Not eligible (score 0-2). b. Qualified (score 3-6)	1. Yes 2. No

Data Management

The data processing technique in this research uses computational calculations from the SPSS (Statistical Product and Service Solution) program. How to operate and process data according to (Darmalaksana, 2020) includes activities: Editing, Coding, Data Entry, and Tabulation.

Data analysis

1. Univariate Analysis

   Data were analyzed univariately to determine the frequency distribution of the independent variables (independent variables) and dependent variables (dependent

variables). After data collection was carried out, the data was analyzed using descriptive statistics.

2. Bivariate Analysis

   Data were analyzed univariately to see the relationship between environmental sanitation and the presence of dengue fever (DHF) vectors using the Chi square test with a value (α) of 0.05. As well as confidence interval (hygiene level 95%) if the p value <0.05 Data processing is carried out by computerization.

   a. If the p value ≤ α (p ≤ 0.05), then the hypothesis (Ho) is rejected, meaning the sample data supports a significant relationship.
   b. If p value > α (p > 0.05), then the hypothesis (Ho) is accepted, meaning the sample does not support the existence of a relationship.

RESULTS AND DISCUSSION

Univariate Analysis

1. **Respondent Characteristics**

Table 1 Frequency Distribution of Respondents Based on Gender

Respondent Characteristics Gender	Amount	Percentage %
Woman	79	54.1
Man	67	45.9
Total	146	100.0

Based on table 1, it shows that of the 146 respondents, the largest number of respondents were male respondents with a total of 67 (45.9%), while female respondents were 79 (54.1%) respondents.

Table 2 Frequency Distribution of Respondents Based on Respondent Age

Respondent Characteristics Respondent's Age	Amount	Percentage %
17 years – 21 years	11	7.5
22 years – 25 years	70	47.9
26 years – 30 years	65	44.5
Total	146	100.0

Based on table 2, it shows that of the 146 respondents, the largest number of respondents were respondents aged 22 years - 25 years with a total of 70 (47.9%), while for respondents aged 26 years - 30 years the number was 65 (44.5%), while for respondents aged 17 years – 21 years total 11 (7.5%) respondents.

2. **Distribution of Clean Water Supply**

Table 3. Attributed Frequency of Clean Water Supply in Medan Polonia District

No	Clean water supply	F	%
1	Not eligible	97	66.4
2	Qualify	49	33.6
Total		146	100.0

From table 3, it can be seen the frequency distribution of clean water provision from 146 respondents, namely 97 (66.4%) provided clean water that did not meet the requirements and 49 (33.6%) met the requirements.

3. **Distribution of Hangers or Stacks of Cloth**

Table 4. Attributed Frequency of Cloth Hangings or Piles in Medan Polonia District

No	Hanger or pile of cloth	F	%
1	Not eligible	79	54.1
2	Qualify	67	45.9
	Total	146	100.0

From table 4, it can be seen the frequency distribution of cloth hangers or piles of 146 respondents, namely 79 (54.1%) cloth hangers or cloth piles that did not meet the requirements and 67 (45.9%) that met the requirements.

4. **Distribution of Water Storage Places**

Table 5. Frequency of Water Storage Places in Medan Polonia District

No	Water reservoirs	F	%
1	Not eligible	80	54.8
2	Qualify	66	45.2
	Total	146	100.0

From table 5, it can be seen the frequency distribution of water storage places from 146 respondents, namely 80 (54.8%) water storage places that do not meet the requirements and 66 (45.2%) that meet the requirements.

5. **Distribution of Trash Conditions**

Table 6. Attributed Frequency of Trash Site Conditions in Medan Polonia District

No	Trash Condition	F	%
1	Not eligible	79	54.1
2	Qualify	67	45.9
	Total	146	100.0

From table 6, it can be seen that the frequency distribution of trash can conditions from 146 respondents, namely 79 (54.1%) trash can conditions that do not meet the requirements and 67 (45.9%) that meet the requirements.

6. **Distribution of the existence of pots/containers**

Table 7. Attributing the frequency of the presence of pots/containers in Medan Polonia District

No	Existence of Pots/Containers	F	%
1	Not eligible	93	63.7
2	Qualify	53	36.3
	Total	146	100.0

From table 7, you can see the frequency distribution of the presence of pots/containers from 146 respondents, namely the presence of pots/containers that do not meet the requirements is 93 (63.7%) and those that meet the requirements are 53 (36.3%).

Distribution of Dengue Hemorrhagic Fever (DBD) Vector

Table 8. Attributed Frequency of the Presence of the Dengue Fever Vector Dengue (DBD) in Medan Polonia District

No	The existence of the Dengue Hemorrhagic Fever (DBD) Vector	F	%
1	Not eligible	60	26.7
2	Qualify	86	73.3
	Total	146	100.0

From table 8, it can be seen the frequency distribution of the presence of dengue hemorrhagic fever (DHF) vectors from 146 respondents, namely the presence of dengue hemorrhagic fever (DBD) vectors that do not meet the requirements are 60 (26.7%) and those that meet the requirements are 86 (73.3%).

Bivariate Analysis

1. **The Relationship between Providing Clean Water and the Presence of Dengue Hemorrhagic Fever (DHF) Vector.**

Table 9 The Relationship between Clean Water Supply and the Presence of Dengue Hemorrhagic Fever (DHF) Vector

No	Clean water supply	The presence of fever vectors dengue bleeding (DHF)						*p-value*
		Not eligible		Qualify		Total		
		F	%	F	%	F	%	
1.	Does not meet the Condition	63	64.9	34	35.1	97	100.0	0.50
2.	Qualify	23	46.9	26	53.1	49	100.0	
	Total	**93**	**63.7**	**53**	**36.3**	**146**	**100.0**	

Based on the results of statistical tests in table 9 above, it was found that the provision of clean water that did not meet the requirements was 97 and the provision of clean water that met the requirements was 49. Meanwhile, the provision of clean water in the presence of Dengue Hemorrhagic Fever (DHF) vectors that did not meet the requirements was 93 (63.7). %) and the provision of clean water with the presence of Dengue Hemorrhagic Fever (DHF) vectors that meet the requirements as many as 53 (36.3%).

The results of statistical tests show that the relationship between providing clean water and the presence of the Dengue Hemorrhagic Fever (DBD) vector in respondents has a p-value of 0.50, where the value is > 0.05 which can be interpreted as meaning that there is no significant relationship between the provision of clean water and the presence of Dengue Hemorrhagic Fever (DBD) vectors in the work area of the Medan Polonia District Health Center.

2. **The Relationship between Hangers or Piles of Cloth and the Presence of Dengue Hemorrhagic Fever (DHF) Vector**

Table 10 The Relationship between Hangers or Piles of Cloth and the Presence of Dengue Hemorrhagic Fever (DHF) Vector

No	Hanger or pile of cloth	The presence of fever vectors dengue bleeding (DHF)						*p-value*
		Not eligible		Qualify		Total		
		F	%	F	%	F	%	
1.	Does not meet the Condition	38	48.1	41	51.9	79	100.0	0.04
2.	Qualify	48	71.6	19	28.4	67	100.0	
	Total	**86**	**58.9**	**60**	**41.1**	**146**	**100.0**	

Based on the statistical test results in table 10 above, it was found that there were 79 hangers or piles of cloth that did not meet the requirements and 67 hangers or piles of cloth that met the requirements.

Meanwhile, there were 86 (58.9%) hangers or piles of cloth with the presence of Dengue Hemorrhagic Fever (DBD) vectors that did not meet the requirements and the provision of clean water with the presence of Dengue Hemorrhagic Fever (DBD) vectors that met the requirements was 60 (41.1%).

The results of statistical tests showed that the relationship between hangers or piles of cloth and the presence of the Dengue Hemorrhagic Fever (DHF) vector in respondents had a p-value of 0.04 where the value was < 0.05 which can be interpreted as meaning that there is a significant relationship between hangers or piles of cloth and the presence of Dengue Hemorrhagic Fever (DHF) vectors in the work area of the Medan Polonia District Health Center.

3. **The Relationship between Water Storage Places and the Presence of Dengue Hemorrhagic Fever (DHF) Vector**

Table 11 The Relationship between Water Storage Places and Existence Dengue Hemorrhagic Fever (DHF) Vector

No	Water reservoirs	The presence of fever vectors dengue bleeding (DHF)						*p-value*
		Not eligible		Qualify		Total		
		F	%	F	%	F	%	
1.	Does not meet the Condition	43	53.8	37	46.3	80	100.0	0.09
2.	Qualify	50	75.8	16	24.2	66	100.0	
	Total	**93**	**63.7**	**53**	**36.3**	**146**	**100.0**	

Based on the results of statistical tests in table 11 above, it was found that there were 80 water reservoirs that did not meet the requirements and 66 water reservoirs that met the requirements. Meanwhile, there were 93 water reservoirs with the presence of Dengue Hemorrhagic Fever (DHF) vectors that did not meet the requirements. %) and water reservoirs with the presence of Dengue Hemorrhagic Fever (DHF) vectors that meet the requirements are 53 (36.3%).

The results of statistical tests show that the relationship between water reservoirs and the presence of the Dengue Hemorrhagic Fever (DHF) vector in respondents has a p-value of 0.09 where the value is < 0.05 which can be interpreted as meaning that there is a significant relationship between water reservoirs and the presence of Dengue Hemorrhagic Fever (DHF) vectors in the work area of the Medan Polonia District Health Center.

4. **The Relationship between the Condition of Trash Cans and the Presence of Dengue Hemorrhagic Fever (DHF) Vector.**

Table 12 The Relationship between the Condition of Trash Cans and the Presence of Dengue Hemorrhagic Fever (DHF) Vector

No	Premises Conditions Rubbish	The presence of fever vectors dengue bleeding (DHF)						*p-value*
		Not eligible		Qualify		Total		
		F	%	F	%	F	%	
1.	Does not meet the Condition	43	54.4	36	45.6	79	100.0	0.15
2.	Qualify	50	74.6	17	25.4	67	100.0	
	Total	**93**	**63.7**	**53**	**36.3**	**146**	**100.0**	

Based on the results of statistical tests in table 12 above, it was found that the condition of trash bins that did not meet the requirements was 79 and the condition of rubbish bins that met the requirements was 67. Meanwhile, the condition of rubbish bins with the presence of Dengue Hemorrhagic Fever (DHF) vectors that did not meet the requirements was 93 (63.7 %) and the condition of rubbish bins with the presence of Dengue Hemorrhagic Fever (DHF) vectors that meet the requirements is 53 (36.3%).

The results of statistical tests show that the relationship between the condition of the trash can and the presence of the Dengue Hemorrhagic Fever (DHF) vector in respondents has a p-value of 0.15 where the value is > 0.05 which can be interpreted as meaning that there is a significant relationship between the condition of the trash can and the presence of the Dengue Hemorrhagic Fever (DBD) vector in the work area of the Medan Polonia District Health Center.

5. **The relationship between the presence of pots/containers and the presence of Dengue Hemorrhagic Fever (DHF) vector.**

Table 13 The relationship between the presence of pots/containers and the presence of Dengue Hemorrhagic Fever (DHF) vector.

No	Existence of Pots/Containers	The presence of fever vectors dengue bleeding (DHF)						*p-value*
		Not eligible		Qualify		Total		
		F	%	F	%	F	%	
1.	Does not meet the Condition	30	50.0	30	50.0	60	100.0	0.15
2.	Qualify	63	73.3	23	26.7	86	100.0	
	Total	**93**	**63.7**	**53**	**36.3**	**146**	**100.0**	

Based on the statistical test results in table 13 above, it was found that the presence of pots/containers that did not meet the requirements was 93 and the presence of pots/containers that met the requirements was 53. Meanwhile, the presence of pots/containers with the presence of Dengue Hemorrhagic Fever (DHF) vectors that did not meet the requirements was as many as 93 (63.7%) and the presence of pots/containers with the presence of Dengue Hemorrhagic Fever (DHF) vectors that met the requirements was 53 (36.3%).

The results of statistical tests show that the relationship between the presence of pots/containers and the presence of the Dengue Hemorrhagic Fever (DBD) vector in respondents has a p-value of 0.05 where the value > 0.05 can be interpreted as meaning that there is a significant relationship between the presence of pots/containers and the presence of Dengue Hemorrhagic Fever (DHF) vectors in the work area of the Medan Polonia District Health Center.

Discussion

The Relationship between Water Supply and the Presence of Dengue Hemorrhagic Fever Vector (DHF)

The provision of clean water is a real form of a person's needs. The provision of clean water in this study is included in the category of providing clean water which does not meet the requirements for the presence of the Dengue Hemorrhagic Fever (DHF) vector. Because people are still not good at using water covers and drains.

The research results show that based on the results of the chi-square test, based on the statistical test results in table 4.9 above, it was found that the provision of clean water

that did not meet the requirements was 97 and the provision of clean water that met the requirements was 49. Meanwhile, the provision of clean water with the presence of the Dengue Hemorrhagic Fever vector (DHF) which did not meet the requirements was 93 (63.7%) and the provision of clean water in the presence of Dengue Hemorrhagic Fever (DBD) vectors which met the requirements was 53 (36.3%).

The results of the bivariate analysis show that the relationship between clean water supply and the presence of the Dengue Hemorrhagic Fever (DBD) vector has a p-value of 0.050 where the value is > 0.05 which can be interpreted as meaning that there is no significant relationship between the provision of clean water and the presence of Dengue Hemorrhagic Fever (DBD) vectors in the work area of the Medan Polonia District Health Center.

This research contradicts research (Azlina et al., 2016) conducted in West Sidomulyo sub-district, Jambi city, showing that there is a relationship between the provision of clean water and the presence of the dengue hemorrhagic fever (DHF) vector. However, this research is in line with research (Zulkarnaini et al., 2012), which states that the relationship between the provision of clean water and the presence of dengue hemorrhagic fever (DHF) vectors in Medan Polonia District is not significant or the effect is very weak. The possible relationship between the provision of clean water and the presence of the dengue hemorrhagic fever (DHF) vector is influenced by the habit of closing the supply of clean water again.

The Relationship between Hangers or Piles of Cloth and the Presence of Dengue Hemorrhagic Fever (DHF) Vector

The habit of hanging clothes indoors is an activity of a person after his daily activities, in this study it is included in the category of hanging or stacking cloth which does not meet the requirements for the presence of Dengue Hemorrhagic Fever (DHF) vectors. Because people still don't have enough lighting and still don't keep the hangers neat in their rooms and warehouses, this results in the existence of Dengue Hemorrhagic Fever (DHF) vectors.

The results of the research show that based on the results of the chi-square test, based on the statistical test results in table 4.10 above, it was found that there were 79 hangers or piles of cloth that did not meet the requirements and there were 67 hangers or piles of cloth that met the requirements. Meanwhile, there were 67 hangers or piles of cloth with the presence of vectors. 86 (58.9%) of Dengue Hemorrhagic Fever (DBD) did not meet the requirements and 60 (41.1%) provided clean water with the presence of Dengue Hemorrhagic Fever (DBD) vectors.

The results of the bivariate analysis show that the relationship between hangers or piles of cloth and the presence of the Dengue Hemorrhagic Fever (DHF) vector has a p-value of 0.04 where the value is < 0.05 which can be interpreted as meaning that there is a significant relationship between hangers or piles of cloth and the presence of Dengue Hemorrhagic Fever (DHF) vectors in the work area of the Medan Polonia District Health Center.

The results of this research are in accordance with the journal (Suyasa et al., 2012). This shows that there is a significant relationship between hangers or piles of cloth and the presence of Dengue Hemorrhagic Fever (DHF) vectors. People still don't have enough lighting and still don't keep the hangers neat in their rooms and warehouses. It is possible for the existence of Dengue Hemorrhagic Fever (DHF) vectors.

The Relationship between Water Storage Places and the Presence of Dengue Hemorrhagic Fever (DHF) Vector

Water reservoirs are a form of a person's needs, in carrying out daily activities in this research, included in the category of water reservoirs that do not meet the requirements for the presence of Dengue Hemorrhagic Fever (DHF) vectors. Because people are still not good at maintaining cleanliness, draining and using covers.

The research results show that based on the results of the chi-square test, based on the statistical test results in table 4.11 above, it was found that there were 80 water reservoirs that did not meet the requirements and there were 66 water reservoirs that met the requirements. Meanwhile, there were 66 water reservoirs with the presence of the Dengue Hemorrhagic Fever vector. (DHF) which did not meet the requirements were 93 (63.7%) and water reservoirs with the presence of Dengue Hemorrhagic Fever (DBD) vectors which met the requirements were 53 (36.3%).

The results of the bivariate analysis showed that the relationship between water reservoirs and the presence of the Dengue Hemorrhagic Fever (DHF) vector in respondents had a p-value of 0.009 where the value was < 0.05 which can be interpreted as meaning that there is a significant relationship between water reservoirs and the presence of Dengue Hemorrhagic Fever (DHF) vectors in the work area of the Medan Polonia District Health Center.

The results of this research are in accordance with the journal (WULAN, 2005). This shows that there is a significant relationship between water reservoirs and the presence of Dengue Hemorrhagic Fever (DHF) vectors. Communities who are still not good at maintaining cleanliness, draining and using covers allow the existence of Dengue Hemorrhagic Fever (DHF) vectors.

The Relationship between the Condition of Trash Cans and the Presence of Dengue Hemorrhagic Fever (DHF) Vector

The condition of an open trash can will cause puddles of water in it caused by rainwater leaking, and an uncovered trash can will be used as a breeding ground for mosquitoes. in this study it was included in the category of trash can conditions that did not meet the requirements for the presence of Dengue Hemorrhagic Fever (DHF) vectors. Because people still don't separate waste according to type, the condition of the trash cans is always open and they don't keep the trash bins clean.

The results of the research show that based on the results of the chi-square test, based on the results of the statistical tests in table 4.12 above, it was found that the condition of rubbish bins that did not meet the requirements was 79 and the condition of rubbish bins that met the requirements was 67. Meanwhile, the condition of rubbish bins with the presence of the Dengue Fever vector There were 93 (63.7%) cases of Dengue (DHF) that did not meet the requirements and 53 (36.3%) of the conditions of rubbish bins with the presence of Dengue Hemorrhagic Fever (DHF) vectors that met the requirements.

The results of the bivariate analysis showed that the relationship between the condition of the trash can and the presence of the Dengue Hemorrhagic Fever (DHF) vector in respondents had a p-value of 0.015 where the value was < 0.05 which can be interpreted as meaning that there is a significant relationship between the condition of the trash can and the presence of the Dengue Hemorrhagic Fever (DBD) vector in the work area of the Medan Polonia District Health Center.

The results of this research are in accordance with the journal (Made et al., 2020).

This shows that there is a significant relationship between the condition of the trash can and the presence of the Dengue Hemorrhagic Fever (DHF) vector. Communities are still not good at separating waste according to type, the condition of trash cans that are always open and not maintaining the cleanliness of trash cans allows for the existence of Dengue Hemorrhagic Fever (DHF) vectors.

The Relationship between the Presence of Pots/Containers and the Presence of Dengue Hemorrhagic Fever (DHF) Vector

unclean yard environment, flower pots, puddles of water in various places, rubbish, especially used tires, coconut shells, pieces of bamboo, drums, used cans, bottles that can hold water for a long time. In this study, it is included in the category of the presence of pots/containers that do not meet the requirements for the presence of Dengue Hemorrhagic Fever (DHF) vectors. Because the community has not carried out activities to bury used goods and does not carry out mutual cooperation once a week.

The results of the research show that based on the results of the chi-square test, based on the statistical test results in table 4.12 above, it was found that the presence of pots/containers that did not meet the requirements was 60 and the presence of pots/containers that met the requirements was 86. Meanwhile, the existence of pots/containers that did Dengue Hemorrhagic Fever (DBD) vectors that did not meet the requirements were 93 (63.7%) and the presence of pots/containers with Dengue Hemorrhagic Fever (DBD) vectors that met the requirements was 53 (36.3%).

The results of the bivariate analysis showed that the relationship between the presence of pots/containers and the presence of the Dengue Hemorrhagic Fever (DHF) vector in respondents had a p-value of 0.05 where the value was < 0.05 which can be interpreted as meaning that there is a significant relationship between the presence of pots/containers and the presence of Dengue Hemorrhagic Fever (DBD) vectors in the work area of the Medan Polonia District Health Center.

The results of this research are in accordance with the journal (Azizah et al., 2018). This shows that there is a significant relationship between the presence of pots/containers and the presence of the Dengue Hemorrhagic Fever (DHF) vector. Communities who have not carried out activities to bury used goods and do not carry out mutual cooperation once a week are likely to have the existence of Dengue Hemorrhagic Fever (DHF) vectors.

CONCLUSION

Based on the results of research regarding the relationship between environmental sanitation and the presence of the Dengue Hemorrhagic Fever (DHF) vector in the Medan Polonia District Health Center Work Area, the following conclusions can be drawn: There is a relationship between the provision of clean water and the presence of the Dengue Hemorrhagic Fever (DBD) vector with p = 0.050. There is a relationship between hangers or piles of cloth and the presence of Dengue Hemorrhagic Fever (DBD) vectors with p = 0.012. There is a relationship between water reservoirs and the presence of Dengue Hemorrhagic Fever (DBD) vectors with p = 0.009. There is a relationship between the condition of trash cans and the presence of Dengue Hemorrhagic Fever (DBD) vectors.) with p = 0.015. There is no relationship between the presence of pots/containers and the presence of the Dengue Hemorrhagic Fever (DHF) vector with p = 0.285.

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