

## **Analysis Of Prevention Measures On The Event Of Dhf In The Community Of Sidomulyo Village, Working Area Of Semen Puskesmas, Kediri Regency**

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### **ABSTRACT**

Dengue hemorrhagic fever (DHF) or Dengue Hemorrhagic Fever (DHF) is an acute febrile disease accompanied by internal bleeding that has a tendency to cause shock or convulsions and can cause death, generally this disease attacks children younger than age. than 15 years. The method used in this study is a survey method which was conducted by distributing questionnaires and direct interviews to respondents with a case control approach. From the research survey of 198 respondents, there were 18 respondents (9.1%) who experienced the incidence of DHF and 180 respondents (90.9%) who did not. There is an analysis between the implementation of 4M Plus and the incidence of DHF in the working area of the Semen Health Center because the p-value Sig. 0.000 < 0.05, which means that H0 is rejected and H1 is accepted, then there is a relationship between the application of 4M plus and the incidence of DHF. The better the implementation of 4M plus, the lower the incidence of DHF, conversely if the implementation of 4M plus is not good, the higher the incidence of DHF.

**Keywords:** 4M plus, DHF, Dengue Incidence

### **INTRODUCTION**

Dengue hemorrhagic fever (DHF) or Dengue Hemorrhagic Fever (DHF) is an acute febrile illness accompanied by internal bleeding that has a tendency to cause shock or convulsions and can cause death, generally this disease attacks children younger than 15 years. . But now the sufferer can come from adults. DHF is an infectious disease caused by the dengue virus and most of its transmission comes from the bite of the Aedes mosquito, either Aedes aegypti or Aedes albopictus.

Dengue fever can appear throughout the year and can affect all age groups. This disease is related to environmental conditions and community behavior. DHF was first recognized in the 1950s but in 1975 until now it is the leading cause of death in children in Asian countries. The World Health Organization (WHO) estimates that 2.5 billion or 40% of the world's population is at risk of dengue disease, especially those living in urban areas in tropical and subtropical countries. It is also currently estimated that there are 390 million dengue infections that occur worldwide each year (WHO, 2015).

In Indonesia alone, Dengue Hemorrhagic Fever was first discovered in Surabaya and Jakarta in 1968, where as many as 58 people were infected and 24 of them died, with a mortality rate of 41.3%. Based on Indonesia's health profile data in 2020, there were 68,407 cases of dengue fever with 493 deaths, while in 2019 there were 204,171 cases of illness with 1,598 deaths. The morbidity rate or incidence rate of dengue fever from 2019 to 2020 is 78.85 per year.

100,000 population to 26.10 per 100,000 population (Ministry of Health, 2020). Provinces in Indonesia with a high IR (Incidence Rate) are South Sulawesi (62.57%), West Kalimantan (52.61%), and Bali (49.93%). East Java Province is ranked number 6 with IR

(Incidence Rate) (43.14%).

## METHODS

No	Penerapan 4M Plus	Kejadian DBD					Jumlah
		DBD		Tidak DBD			
1.	Buruk	18	9,1%	72	36,4%	90	45,5%
2.	Baik	0	0,0%	108	54,5%	108	54,5%
	Jumlah	18	9,1%	180	90,9%	198	100%
p = 0,000							α = 0,05

The method used in this study is a survey method conducted by distributing questionnaires and interviews to respondents directly with a case control approach. This study was only conducted at the houses of DHF sufferers and 10 houses around the patient's house.

No	Penerapan 4MPlus	Jumlah (N)	Prosentase (%)
1	Buruk	90	45,5
2	Baik	108	54,5
Total		198	100,0

## RESULT

Distribution of 4M Plus Implementation in Sidomulyo Village Working Area of Semen Health Center

### Bivariate Analysis

The relationship between the implementation of 4M Plus and the incidence of dengue fever in Sidomulyo Village, the Working Area of the Semen Health Center

Based on the table above, it can be interpreted that 18 (9.1%) respondents with poor implementation of 4M had DHF, 108 (54.5%) respondents with good application of 4M did not suffer from DHF.

The results of data analysis using the chi-square test were obtained; the result of the value of value = 0.000 <  $\alpha = 0.05$  which means  $H_0$  is rejected and  $H_1$  is accepted then there is a relationship between the application of 4M plus and the incidence of DHF, meaning that the better the implementation of 4M plus, the lower the incidence of DHF, on the contrary, the less good the application of 4M plus, the higher the incidence of DHF.

## DISCUSSION

Implementation of 4M Plus in Sidomulyo Village, Working Area of the Semen Health Center based on Univariate analysis, the frequency of 4M Plus application was mostly 90 people (45.5%) and the frequency of good respondents was 108 people (54.5%). In handling DHF, community participation to suppress DHF cases is very necessary. Therefore, the Mosquito Nest Eradication (PSN) program with the 4M Plus method needs to be carried out continuously throughout the year, especially during the rainy season. This activity is carried out so that the *Aedes aegypti* mosquito population can be suppressed as much as possible so that the transmission of DHF does not occur.

## CONCLUSION

There is an analysis between the implementation of 4M Plus and the incidence of DHF in the working area of the Semen Health Center because the p-value Sig.  $0.000 < 0.05$ , which means that  $H_0$  is rejected and  $H_1$  is accepted, then there is a relationship between the application of 4M plus and the incidence of DHF, meaning that the better the implementation of 4M plus, the lower the incidence of DHF.

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