### Medical Research, Nursing, Health and Midwife Participation

https://medalionjournal.com

### RELATIONSHIP BETWEEN HEALTH BEHAVIOR AND DENGUE HEMORRHAGIC FEVER (DHF) IN TUAN RONDAHAIM HOSPITAL, PAMATANG RAYA, 2016

#### Riada Mareny

Universitas Efarina

#### Abstract

The number of cases of Dengue Hemorrhagic Fever (DHF) in Simalungun District based on health data sources from the Simalungun District Health Office in 2016 in Simalungun District reached 903 cases with 23 deaths. This research was conducted to determine the relationship between health behavior and the incidence of Dengue Hemorrhagic Fever (DHF) at Tuan Rondahaim Hospital Pamatang Raya in 2016. This type of research is descriptive with a population of 30 people and a sample of 30 people where the population is used as the sample. The results of this study obtained that the majority of respondents had negative data from Dengue Hemorrhagic Fever (DHF), namely 18 people (60Y6), the majority had a habit of cleaning water reservoirs, namely 17 people (56.7"0), the majority had a habit of closing water reservoirs, namely 16 people (53,390), the majority have a habit of not draining water reservoirs, namely 17 people (56.7"0), the majority have a habit of burying used water items, namely 16 people (\$53.3Y6), chi-sguare that the habit of cleaning, closing, draining, shelter water has a relationship with the incidence of Dengue Hemorrhagic Fever (DHF) because the p value is  $\in$  0.05. University of Efarina Pamatang Raya and using the results of this study will add knowledge and insight that will conduct further research on clean and healthy living behavior in all settings of life. The results of this study can be used as input for disease prevention and eradication program managers at Tuan Rondahaim Hospital Pamatang Raya in 2016, especially as a consideration in determining the strategy for preventing and eradicating Dengue Hemorrhagic Fever (DHF). Provide additional information and insight about the prevention and eradication of Dengue Hemorrhagic Fever (DHF). Future researchers can use the results of this study as basic data for further research on clean and healthy living behavior.

Keywords: Health Behavior, Dengue Hemorrhagic Fever

#### INTRODUCTION

The incidence of dengue hemorrhagic fever has increased dramatically and worldwide in recent decades. It is estimated that around 2.5 billion people around the world are at risk for dengue fever. They mainly live in urban areas of tropical and subtropical countries. It is estimated that around 50 million cases of dengue fever are found every year, with 500,000 cases requiring treatment at the hospital. Of the cases above, around 25,000 deaths occur each year (WHO, 2010).

This disease is one of the communicable diseases that can cause epidemics, so according to Law no. 4 of 1984 concerning outbreaks of infectious diseases and Regulation of the Minister of Health no. 560 of 1989, every sufferer, including suspects of DHF, must be reported immediately no later than within 24 hours by a health service unit (hospital, health center, polyclinic, medical center, private practice doctor, and others) (Depkes RI, 2006).



Riada Mareny

Dengue Hemorrhagic Fever (DHF) is an infectious disease caused by the dengue virus which is transmitted through the bite of the Aedes aegepty and Aedes albopictus mosquitoes which are widespread in homes and public places throughout Indonesia, except for those with an altitude of more than 1000 meters above sea level. This disease mainly attacks children which is characterized by high fever, bleeding and can result in death and cause epidemics (Djunaedi, 2006).

Indonesia is at great risk of contracting dengue hemorrhagic fever because the Dengue virus and its transmitting mosquito, namely Aedes aegypti, are widespread in all rural and urban areas, both in homes and in public places, except for areas with an altitude of more than 1,000 meters. from sea level. Tropical climate is also 12 cases (IR < 2.45), and in 2012 there were 16 cases (IR < 3.26). The largest number of cases occurred in 2016 (Simalungun Health Office, 2016). Behavior is the second biggest factor after environmental factors

affect the health of individuals, groups, or society (Notoatmodjo, 2007). From years of experience in the implementation of this education, both in developed and developing countries have experienced various obstacles in order to achieve their goals, namely to realize healthy living behavior for their people. The biggest perceived obstacle is the enabling factor. From existing studies, it is revealed that even though people's awareness and knowledge about health is high, practice about health or healthy living behavior is still low (Soekidjo Notoatmodjo, 2007). From the preliminary survey that was conducted on 30 respondents, it was found that 19 respondents (65Y6) at Tuan Rondahaim Pamatang Raya Hospital in 2016 did not implement the "3M Plus" program properly, due to lack of practice on health behavior. Based on the description of this background, the researcher took the title "The Relationship between Health Behavior and Dengue Hemorrhagic Fever (DHF) Incidence at Tuan Rondahaim Pamatang Raya Hospital in 2016"

#### **METHODS**

#### 1. Types of research

This type of research is descriptive which aims to determine the relationship between health behavior and the incidence of Dengue Hemorrhagic Fever (DHF) at Tuan Rondahaim Hospital Pamatang Raya Simalungun Regency in 2016.

#### 2. Location and Time of Research

Research Location The research location was conducted at Tuan Rondahaim Hospital Pamatang Raya, Simalungun Regency. Time of Research This research was conducted in July-September 2016

#### 3. Population and Sample

Population The population in this study were new patients who had complaints such as dengue hemorrhagic fever and patients who were positive for dengue hemorrhagic fever



Riada Mareny

who were treated at Tuan Rondahaim Hospital Pamatang Raya, namely as many as 30 people.

#### 4. Sample

The sample size in the study was carried out using a total sampling technique where all of the population was used as a sample, namely 30 people

#### RESULTS AND DISCUSSION

Based on the results of research conducted regarding the relationship between health behavior and the incidence of Dengue Hemorrhagic Fever (DHF) at Tuan Rondahaim Pamatang Raya Hospital in 2016 with 30 respondents, the following can be discussed:

# The Relationship between the Habit of Cleaning Dengue Water Reservoirs The Incidence of Dengue Hemorrhagic Fever (DHF) at Tuan Rondahaim Pamatang Raya Hospital in 2016

From the results of the statistical test using Chi-sguare, we obtained a p Yalue of 0.035 because the p value < 0.05, then Ho was rejected, meaning that there was a significant relationship between cleaning the water reservoir and the incidence of Dengue Hemorrhagic Fever (DHF) at Tuan Rondahaim Hospital Pamatang Raya 2016 year.

This research is in accordance with the theory that eradication of mosquito nests is carried out simultaneously and continuously to eradicate breeding places for Aedes Aegypti mosquitoes that do not breed, namely cleaning the water storage areas by draining the water and brushing the walls once a week (Kendal DKK, 2006)

## The Relationship between the Habit of Closing the Water Tank and the Incidence of Dengue Hemorrhagic Fever (DHF) at Tuan Rondahaim Pamatang Raya Hospital in 2016

From the results of the Chi-sguare test, a p value of 0.043 was obtained because the p value was 0.05, so Ho was rejected, meaning that there was a significant relationship between closing the water reservoir and the incidence of Dengue Hemorrhagic Fever (DHF) at Tuan Rondahaim Hospital, Pamatang Raya in 2016. This in accordance with WHO theory (Endang S, Praba Ginanjar, Retno, 2004), that the number of water reservoirs and watering places that can be breeding grounds for mosquitoes is a potential condition for outbreaks of Dengue Hemorrhagic Fever. There are many ornamental plants and garden plants, which affect humidity and lighting in the house and yard. If there are lots of ornamental plants and yard plants, it will add more space



Riada Mareny

## The Relationship between the Habit of Draining Water Storage and the Incidence of Dengue Hemorrhagic Fever (DHF) at Tuan Rondahaim Pamatang Raya Hospital in 2016

Types of water reservoirs (TPA) as breeding places for the Dedes aegypti mosquito. Types of water reservoirs are distinguished again based on the material of the landfill (metal, plastic, porcelain, fiberglass, cement, pottery and others), the color of the landfill (white, green, brown, etc.), the volume of the landfill (less than 50 It, 51-100 It, 101-200 It and others), landfill cover (present or not), lighting on landfill (light or dark) and so on.

From the results of the Chi-sguare test, the result is a p value of 0.008 because the p value is 0.05, so Ho is rejected, meaning that there is a relationship between the habit of draining water reservoirs and the incidence of Dengue Hemorrhagic Fever at Tuan Rondahaim Pamatang Raya General Hospital in 2016. The results of this study are in accordance with the theory of the Indonesian Ministry of Health (2002), that the breeding places for the Aegypti mosquito are in the form of pools of water that are accommodated in containers called containers and not in standing water directly on the ground.

### Relationship Between the Habit of Burying Used Goods and Dengue Hemorrhagic Fever (DHF) Incidence at Tuan Rondahaim Pamatang Raya Hospital in 2016

From the results of the Chi-sguare test, a p value of 0.011 was obtained because the p value was 0.05, so Ho was rejected, meaning that there is a relationship between the habit of burying used goods and the incidence of Dengue Hemorrhagic Fever at Tuan Rondahaim Pamatang Raya General Hospital in 2016. The results of this study are in accordance with The theory put forward by the Indonesian Ministry of Health (2009), states that one way to prevent and eradicate it

#### **CLOSING**

#### Conclusion

- 1. The majority had negative cases of Dengue Hemorrhagic Fever (DHF), namely 18 people (60%), while the minority had positive Dengue Hemorrhagic Fever (DHF), namely 12 people (40%).
- 2. The majority have the habit of cleaning water reservoirs, namely 17 people (56.7%), while the minority do not have the habit of cleaning water reservoirs, namely 13 people (43.3%).
- 3. The majority have the habit of closing water reservoirs, namely 16 people (53.3%), while the minority does not have the habit of closing water reservoirs, namely 14 people (46.7%).
- 4. The majority have a habit of not draining water reservoirs, namely 17 people (56.7%), while the minority have a habit of draining water reservoirs, namely 13 people (43.3%).
- 5. The majority have the habit of burying used water, namely 16 people (53.3%), while the minority does not have the habit of burying used goods, namely 14 people (46.7%).

#### REFERENCES

- North Sumatra Provincial Health Office. 2016 North Sumatra Provincial Health Profile Year 20. Medan: Oinkes Sunu, 2002, Guidelines for Dengue Ernsomologists Survey. Jakarta
- Republic of Indonesia Ministry of Health. . 2005. Prevention and Eradication of Dengue Hemorrhagic Fever. Jakarta:
- North Sumatra Provincial Health Office 2016. North Sumatra Province Health Profile 2006. Medan: North Sumatra Health Office
- . 2016. Standing Procedures for KLB and Disaster Management for North Sumatra Province. Medan: Health Office Sum.
- Eric Tapan. 2004. Flu, HFMD, Diarrhea in Travelers, Malaria, Dengue Fever, and Typhus. Jakarta: Torches Popular Library.
- Handrawan Nadesul. 2000. Causes, Prevention, and Treatment of Dengue Fever. Jakarta: Puspa Swara.
- Mukono. 2000. Basic Principles of Environmental Health. "Surabaya: Airlangga University Press.
- Soegeng Soegijanto. 2002. Pediatrics: Diagnosis & Management. New York: Salemba Medika.
- Soekidjo Notoatmodjo. 2007. Health Research Methodology. Jakarta: PT. Rineka Cipta.
- . 2007. Behavioral Education and Health. Jakarta: PT. Rineka Cipta.
- Sri Rejeki H Hadinegoro et al. 2005. Dengue Hemorrhagic Fever. FKUI: Jakarta.
- Sudigdo Sastroasmoro. 2002. Fundamentals of Clinical Research Methodology. Jakarta: University of Indonesia.
- Sudigdo Sastroasmoro & Sofyan Ismail. 2002. Public Health Sciences: Basic Principles. Jakarta: PT. Rineka Cipta.
- Suharsimi Arikunto. 2002. Research Procedures A Practice Approach. Jakarta: PT Rineka Cipta.