KNOWLEDGE RELATIONSHIPS AND FAMILY ATTITUDES IN DENGUE HEMORRHAGIC FEVER PREVENTION ACTIVITIES AT NAIONI

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Abstract
Dengue Hemorrhagic Fever is an environment-based infectious disease that can cause death in a short time (Ministry of Health RI, 2011). Knowledge is the result of observing, hearing, feeling and thinking as a basis for making decisions to act in order to describe knowledge gained from experience. Knowing the relationship between knowledge, attitudes, and family beliefs in Dengue Hemorrhagic Fever prevention activities at NAIONI Health Center in Kupang City. In this study using the Case Study Method with a total sampling sample of 50 respondents The results showed that respondents' knowledge in dengue hemorrhagic fever prevention activities in the Good category was 18%, Enough 50%, Less 32%. While the attitude of respondents who were positive 42% and negative, 58% and respondents who were sure 30% and unsure 20%. Family knowledge in efforts to prevent dengue hemorrhagic fever is sufficient.

Keywords: Knowledge; Family; Dengue Hemorrhagic Fever Prevention

INTRODUCTION
Dengue Hemorrhagic Fever (DHF) is an infectious disease that can cause instant death (Kemenkes, 2011). Family knowledge about DHF prevention. Able to keep the house and environment clean to be free of mosquito larvae as a result of knowing after they conserve the objects they find.

Healthy living behavior definitely triggers individual awareness to improve health both in families and individuals including the community, the number of cases of Dengue Hemorrhagic Fever (DHF) due to family ignorance about prevention techniques, and maintaining a clean environment (Kemenkes RI., 2017). The high incidence of DHF is caused by the low family knowledge about DHF, starting with the breeding of Aedes Aegypti mosquitoes, how to transmit, symptoms of DHF, to the handling of DHF.

WHO data in 2010 the number of dengue fever cases continued to increase to 2.2 million, to 3.2 million in 2015. The highest incidence of dengue fever in Indonesia is in West Java Province (36,631 cases), East Java 24,005 cases, DKI Jakarta 20,423 cases, Bali Province 20,329 cases, and East Kalimantan Province 10,712 cases (Kemenkes RI, 2020).

The prevalence of dengue fever in NTT since 2021 has amounted to 2,543 cases spread across West Manggarai Regency with 198 cases, Kupang City with 181 cases, Sikka with 136 cases, Southwest Sumba with 88 cases, Lembata with 60 cases, South Central Timor with 33 cases,
Sabu Raijua with 31 cases, Belu 24, Central Sumba with 10 cases, Malacca with 17 cases, and Nagekeo with 17 cases.

At NAIONI health center, in 2019 dengue cases amounted to 19 cases. And increased in 2020 to 26 cases. Although in 2021, dengue fever decreased by only 14 cases. but in 2022 dengue fever has increased again to 50 cases, this is due to several risk factors that affect the spread of dengue such as family behavior in carrying out prevention through environmental cleanliness and the level of family knowledge of understanding dengue prevention by eradicating mosquito nests in the environment is still lacking.

Puskesmas NAIONI implements the family approach program launched by the Indonesian Ministry of Health in 2017 in realizing Indonesian people who behave healthily, live in a clean environment, and are aware of the importance of health (Kemenkes, 2018).

Even though it has implemented the Healthy Indonesia program, dengue problems are still found at NAIONI Health Center. So the role of the family in efforts to prevent dengue hemorrhagic fever is a major factor in reducing and even eliminating DHF from the community, it is necessary to provide family understanding in efforts to prevent DHF in the form of education on how to breed AedesAegypti mosquitoes, how to transmit, symptoms of the disease to handling DHF.

**METHOD RESEARCH**

This study is a descriptive research to determine the relationship, knowledge, attitudes and beliefs of families in the prevention of dengue hemorrhagic fever in the working area of the NAIONI Health Center in Kupang City; with a research population of 50 respondents who have certain characteristics set by researchers to be studied and then drawn conclusions (Sugiyono, 2013).

Operational Definition, for the independent variable of knowledge is the result of knowing the family about the benefits of environmental hygiene in the prevention of DHF consisting of 20 questions with correct answers 1, false 0, with a percentage of scoring; Knowledge is good if the question can be answered correctly 17-20, the question, knowledge is medium if scoring is 12-16, with the category Good if the score is ≥80%. Enough If scor value 60-80% . less if the value is ≤60; For attitude variables, respondents respond privately to stimuli or objects both internal and external so that their manifestations cannot be seen, but can be transferred first from closed behavior which includes: connitive, affective and conative consisting of 8 positive questions with a score of 4=SST, 3=S, 2=TS, 1=STS and 7 negative questions with a score of 1=SST, 2=S, 3=TS, 4=STS with Positive category if the value is >37.5; Negative if the value of < 37.5;

This study obtained data from fifty respondents, using questionnaires containing a number of questions based on predetermined variables such as: knowledge, attitudes, beliefs and prevention measures for DHF; through a tiered procedure, starting from submitting research to the village government and the person in charge of the infectious disease program at NAIONI Health Center, to determine the meeting time, to socialize activities (informed consent) followed by the distribution of questionnaires to respondents to capture data related to variable

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indicators related to knowledge and behavior of hypertension (Sugiyono, 2018).

The questionnaire in this study was 34 questions, consisting of: 4 demographic questions, 30 questions from independent variables such as: Knowledge, attitudes and beliefs of 15 questions each, with a checklist mark (✓) on one of the answers available in the column, with an ordinal scale with good, sufficient and less answers, positive and negative attitudes,

Data processing by editing to find out the completeness of the data obtained Hidayat, (2011) followed by coding data to convert data from letters, into numbers on all questionnaires Knowledge variables using the instrument of 15 questions by having the correct answer with a value of 1, and the wrong answer given a value of 0. All answers will be added with the highest total score of 15 points, and the value choked up to 0. For the determination of the category researchers are assessed using scoring presentation methods such as: 1=Good if >80% with SCOR 17-20 questions answered correctly by respondents. 2.= Enough if 60 – 80 % with scor 12-16 questions answered correctly by respondents. 3. Less when <60% with scor 0-11 questions answered correctly by respondents.

The attitude of respondents towards efforts to prevent dengue hemorrhagic fever using the instrument of 15 statements includes 8 points of positive statements (numbers: 1, 3, 4, 6, 8, 10, 11, 12) the answer is scored 4 = strongly agree, 3 = agree, 2 = disagree and 1 = strongly disagree, and 7 items negative statements (numbers: 2, 5, 7, 9, 13, 14, 15), the answer is scored 1 = Strongly agree (SS), 2 = Agree (S), 3 = Disagree (TS), 4= Strongly Disagree (STS), with the highest score 15 – 60 obtained from the number of questions multiplied by the highest weight, and the lowest score 1-4 based on the answer score that has been given, so that highest score for attitude performance is 4 and the lowest score is 1 with the calculation of the highest number of scores divided by the number of categories (75/2=3.75) which are broken down into 2 categories, so it is said to be a positive attitude, if the total scor of the answers strongly agree and agree ≥ 37.5, and Negative attitude if the total score of the answers disagree and strongly disagree ≤ 37.5

Data were analyzed using computers which included univariate analysis, used to determine the frequency distribution of each variable, by describing and summarizing the data scientifically in the form of tables or graphs (Handayani, 2021). In this study the univari analyzed were demographic variables (age, gender, occupation, education), variables of knowledge, attitudes and precautions.

RESULT AND DISCUSSION

Based on the results of the Univariate test showed that majority of respondents were in the age group of 26-35 years.

This is in line with the theory developed by Sari et al., (2020) states that age can affect a person's comprehension and mindset. As he gets older, the more his grasp and mindset develop, so that knowledge he gains is getting better. At a young age, individuals will play a more active role in society and social life and make more preparations for successful efforts to adjust to old age, besides that young people will spend more time reading. Intellectual ability, problem-solving,
and verbal ability reported almost no decline at this age.

This is in line with the results of research conducted by Tiknaiidj & Tarigan, (2021), concerning Overview of Knowledge, Attitudes, Actions Towards DHF Prevention in Oesapa Village, showing that respondents aged 27-36 years can take efforts to prevent DHF because as they get older, the more their comprehension and mindset will develop.

Sufficient knowledge does not necessarily make efforts to prevent DHF but good knowledge can make efforts to prevent DHF.

**Sex characteristics**

Based on the results of the description test, it shows that majority of respondents are men. Gender is often associated with roles, behaviors, preferences, and other attributes. The female gender is a figure who has a tendency to be educated to be more expressive, sympathetic, cooperative, independent and happy to help. This phenomenon produces women who are more concerned about environmental conditions and their health.

Univariate test results showed no relationship between the sex of the head of the family and DHF prevention behavior. Although the table shows good dengue prevention behavior carried out by male heads of families compared to women. This is contrary to the theory above. So that not only women can prevent DHF, with information about maintaining environmental health, men can also prevent DHF.

The results of this study are in line with research conducted by Tiknaiidj & Tarigan, (2021) on Overview of Knowledge and Behavior of Prevention of Dengue Dengue Fever Transmission in Antiga Village, Manggis I Health Center Working Area with the majority of respondents being male with 62 people (62%) from the total respondents of 100 people.

**Overview of the educational characteristics of respondents**

Based on the results of the description test, it shows that majority of respondents with the highest education classification are high school.

In theory, according to Amanda et al.,( 2020), education is guidance that can be given to someone about a new thing so that they can know and understand it. Higher education will make it easier for someone to get new information, which will later increase the experience and insight that person has. All responses given by an individual to the object observed are strongly influenced by the level of education, the response given can later be in the form of new knowledge possessed by an individual.

This is in line with the results of research conducted by Tiknaiidj & Tarigan, (2021) on the Overview of Knowledge, Attitudes, Actions Towards DHF Prevention in Oesapa Village, showing that majority of respondents had a high school education of 55 people (56%).

By having sufficient knowledge results, this shows that someone who has higher education alone does not guarantee to be able to prevent Dengue Hemorrhagic Fever.

**Job overview**

Based on the results of the Univariate test shows that majority of respondents to the highest jobs are self-employed. In theory according to Notoatmodjo, (2012) good experience and knowledge are also obtained from the work environment of an individual, for example: someone
who works in a health environment, they will directly or indirectly get information and knowledge related to the health sector.

This is in line with the results of research conducted by Nurfitriani, (2017) on the Role of Family in Efforts to Prevent DHF in Mayang Mengurai Village, Kota Baru Jambi District, showing that majority of respondents were self-employed as many as 29 people (30.9%).

**Overview of Family Knowledge in DHF Prevention at NAIONI Health Center**

From the results of this study, it was found that family knowledge in efforts to prevent Dengue Hemorrhagic Fever (DHF) at NAIONI Health Center was included in the sufficient category. Sufficient family knowledge is due to education and work factors. According to R. Hidayat et al., (2015) that higher a person's education the easier it is to receive information and the better the knowledge possessed so that use of communication can be effectively carried out, this is proven in education having sufficient knowledge. From the results of the study, it was found that majority of respondents had a high school education.

Another factor affecting knowledge is work. According to Notoatmodjo, (2012a) work can also affect respondents' knowledge, this is related to one's socioeconomics, the higher one's economic level will increase the level of knowledge besides that higher one's socioeconomic status the easier it is to obtain knowledge. From the results of the study, it was found that majority of respondents worked as self-employed people. A job is something a person does to earn income. The results of the study were conveyed by Rohayati, (2022) that there was no difference in the level of satisfaction between groups who had civil servant jobs, private jobs, or those who did not work. Based on this opinion, researchers assume that patients get the same treatment regardless of the type of work.

According to researchers, the results of the study obtained are in line with the theory that sufficient knowledge possessed by respondents due to several factors, namely educational factors. The higher a person's education, the wider the knowledge he has and vice versa. Education means the guidance given by a person towards the development of others towards certain ideals that determine man to do and fill life to achieve safety and happiness. The higher a person's education, the easier it is for the person to receive information (Ariani & Pragholapati, 2021).

Education is the official status of the final level of education that patient has taken. In general, someone who has a higher level of education has high knowledge so that they tend to have more complex needs, therefore patients who have higher education need more complete and quality services to get satisfaction. This statement is supported by Suchman, (2009) that higher the public knowledge about disease, the higher the health service.

The results of research on family attitudes in dengue prevention conducted on 50 respondents found 29 respondents, (58%) had negative attitudes, and 21 respondents (42%) had positive attitudes which showed that results of univariate tests there was a strong relationship between family attitudes and dengue prevention activities at NAIONI Health Center.

This research is the same as Kurniawati & Ariyani, (2022) showing that there is a meaningful relationship between attitudes and family activities at Bambang Lipuro Health Center Yogyakarta with a value of $P = 0.001$, and Lestari's research (2005) at Puskesmas Kemiri Lipuro.
Depok with P = 0.015 which says there is a meaningful relationship between attitudes and family activities in preventing DHF

The results of this study are in accordance with the green theory (1998) in Nusalam 2015 which states that attitude is one of the factors that play a role in health behavior. Attitudes do not automatically manifest in action, but to realize these attitudes requires concrete actions and other supporting factors in conditioning the attitude.

Notoatmodjo, (2012a) explained that attitudes formed cannot be changed instantly because they are closely related to individual internal and external factors, so as to change respondents' attitudes require a policy and increase knowledge.

**Family confidence in dengue prevention activities**

Ramdhani, (2021) divides *the Lotus of control into Lotus of internal control* where individuals believe that calamity that occurs is *the result of their behavior, and the Lotus of control external* individuals convince that natural events are factors of luck, while destiny is under the *control of others*.

The results of Univariate's analysis found that 30 respondents (60%) ticked environmental hygiene activities to prevent dengue disease and only 20 respondents (40%) were not sure

The results of this study are the same as Ramdhani's 2012 theory explaining that individuals with *an internal locus of control* have a sense of trust or self-confidence, perseverance, and never give up, independent, and easily believe in others so they want to participate in activities.

**CONCLUSION**

From the observations that have been made to respondents about the level of family knowledge in dengue prevention at NAIONI Health Center in 2022, the author concludes that knowledge in efforts to prevent dengue fever at NAIONI Health Center in June 2022 is categorized as The characteristics of respondents at NAIONI Health Center, the largest age group is 26-35 years, the majority of the most gender is male, the last highest level of education is high school / equivalent, and the majority of respondents' jobs are self-employed. The level of family knowledge about dengue prevention efforts at NAIONI Health Center is categorized as Sufficient.

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