

## Analysis of Behaviour, Social Support and Motivation of Jumantik Cadre to Dengue High Fever (DHF) Entomological Index in the Pesantren 1 Public Health Center Kediri City

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### ABSTRACT

The occurrence of DHF outbreaks is indicated because the vector population of *Aedes aegypti* is increasing, this mosquito is an insect that always causes problems, its role as a vector carrier of disease can cause serious problems. The purpose of this research is to analyze influence jumantik cadres on the DHF entomology index in the Work Area of the Pesantren 1 Public Health Center, Kediri. The design of this study is a quantitative analytic study with a cross sectional approach with the focus of the research being aimed at analyzing influence behavior, social support and motivation of jumantik cadres on the DHF entomology index in the Work Area of the Pesantren 1 Public Health Center Kediri City with a population of 161 respondents and a sample of 115 respondents drawn by technique *Simple Random Sampling*. Results of the Multiple Linear Regression analysis, it shows that with a p-value of  $0.000 < 0.05$ , H1 is accepted so it can be concluded that simultaneously there is an effect behavior, social support and motivation towards DHF entomology index in the working area of the Pesantren 1 Public Health Center Kediri City, the amount of influence is 71.1% Jumantik cadres must be able to carry out an entomological survey properly, where if they find larvae, they can immediately report them to the relevant party and immediately provide education to family members in the house so that they can help in 3M plus efforts and also reduce the incidence of houses with larvae in each working area.

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### INTRODUCTION

Demadengue hemorrhagic fever (DHF) is an infectious disease by the dengue virus that is transmitted through the bite of the *Aedes Aegypti* mosquito, characterized by a sudden high fever accompanied by bleeding manifestations and tends to cause shock and death. This disease is one of

the most important public health problems in the world in general and Indonesia in particular and often causes outbreaks of Extraordinary Events (KLB) with a high number of deaths (Depkes RI, 2018).

The occurrence of DHF outbreaks is indicated because the vector population, namely the *Aedes aegypti* mosquito, is increasing, this mosquito is an insect that always causes problems for humans, its role as a vector carrier of disease can cause serious problems (Handayani, 2012). This disease attacks all age groups, but most of them are children aged 15 years and under (Kemkes RI, 2011).

According to the World Health Organization (WHO) the incidence of dengue fever around the world has increased drastically in the last 20 years, it is estimated that the number of people at risk of developing this disease is around 2.5-3 billion and 20 million annually. Indonesia is an area that has the potential for dengue infection (Depkes RI, 2018).

According to Indrawati (2018) the number of dengue cases in Indonesia continues to increase and the spread is widespread, interspersed with outbreaks of outbreaks in the range of 5-6 years. In 2018, there were around 150,000 cases with a death rate of 1,317 people. Meanwhile, there were 16,858 cases of dengue fever in East Java in the same year. With a death rate of 197 people.

In Kediri, the incidence rate in 2017 was 155 people. In addition, in 2018 the incidence of dengue fever was 215 people. Meanwhile, in 2019 the number of dengue cases was 223 people. With the highest incidence in the working area of the Pesantren 1 Public Health Center Kediri City with 47 cases, and no one experienced death. The number of dengue cases at the Pesantren 1 Public Health Center in Kediri City has increased from 21 cases previously in 2018, while in 2019 it jumped to 47 cases of DHF. So that an increase in the number of dengue sufferers causes the entomology index number in the city of Kediri to also increase, especially in the working area of the Pesantren 1 Public Health Center in Kediri City (Dinkes Kota Kediri, 2020).

Based on the results of a preliminary study conducted by researchers on March 9, 2020 to 10 jumantik cadres, it was found that a total of 7 respondents (70%) had low motivation in conducting regular surveys of larvae to each house, which was because most people were not interested in their homes visited by jumantik cadres, besides that it was also due to the low information obtained by cadres and the community about the importance of the jumanti survey with regeneration. Due to these conditions, the entomological index rate was found to be high in the 7 areas managed by the cadre, reaching > 15%. While a number of 3 respondents (30%) have high motivation where it can be seen that cadres are active in conducting home visits to socialize the dangers of dengue mosquitoes in the environment at large. And the entomological index number <5%.

Based on AI, an area can be categorized as high, medium and low risk, namely high risk if  $AI > 55$  per 100,000 population, medium risk if AI is 20-55 per 100,000 population and low risk if  $AI = 15$  years. Looking at this data the possibility of transmission is not only at home but at school or at work. So that the PSN movement needs to be encouraged in schools and at work. It appears that there has been a change in the pattern of DHF disease, where previously DHF was a disease in children under 15 years, now it has attacked all age groups, even more so in productive age. It needs to be investigated further about what influences it, whether because the virus is getting more virulent (malignant) or due to other influences. Eradicating mosquito nests (PSN) is the key to success in breaking the spread. But in general, the community does not properly understand the prevention and management of dengue problems. Therefore, providing information related to prevention and repetition is still needed (Liliweri, 2017).

DHF transmission can occur in all places where there are mosquitoes that transmit DHF. Potential places for dengue transmission include dengue endemic areas, public places where people from various regions gather to allow for the exchange of several types of dengue virus (schools, health facilities, hotels, shops, markets, restaurants, places of worship) and new suburban settlements with residents who generally come from various regions (Depkes RI, 2015).

The large number of potential mosquito breeds that are difficult to monitor such as used cans, drums, used tires, tree holes and the use of open holy water containers placed in temples by Balinese Hindus can be one of the risk factors affecting the spread of mosquitoes (Purnama, 2012). The

behavior of the community in cleaning mosquito breeding places is not carried out routinely and the number of containers that can be used as water reservoirs, especially during the rainy season, has an impact on the low larvae free rate (ABJ) and the risk of spreading dengue hemorrhagic fever in the environment. Various information obtained by the public about mosquito breeding sites and dengue fever prevention will influence their attitudes and actions in eradicating dengue fever. So that the evaluation of knowledge,

Based on the above conditions, the authors are interested in researching about Jumantik cadre analysis of the DHF entomology index in the Pesantren 1 Public Health Center Kediri City.

## MATERIALS AND METHODS

Researchers used an observational quantitative design with a cross sectional approach, which is a study to study the dynamics of the correlation between risk factors and effects, by approaching, observing or collecting data at once (point time approach), that is, each subject. The study was only observed once and measurements were made of the character status or subject variables at the time of examination. This does not mean that all research subjects were observed at the same time (Soekidjo, 2012). This research will analyze jumantik cadres on the DHF entomology index score in the Pesantren 1 Public Health Center Kediri City.

The total population of 161 respondents and a sample of 115 respondents who were taken by simple random sampling technique. Data analysis using Linear Regression test.

## RESULTS

Table 1 Results of linear regression analysis Jumantik cadre analysis of the DHF entomology index in the working area Pesantren 1 Public Health Center Kediri City which will be held on 1 -30 October 2020

Variable	Sig	B	R <sup>2</sup>	Sig
(Constant)	0.009	1,813		
Behavior	0.002	0.398	0.717	0.000
Social Support	0.009	0.011		
Motivation	0.005	0.203		

### 1. Partial

#### a. Effect of Behavior on the Entomological Index

Based on the results of Linear Regression analysis, it shows that the p-value is 0.002 <0.05, then H1 is accepted, so it is concluded that partially there is influence behavior against DHF entomology index in the working area of the Pesantren 1 Public Health Center Kediri City.

#### b. The Effect of Social Support on the Entomology Index

Based on the results of Linear Regression analysis, it shows that the p-value is 0.009 <0.05, then H0 is rejected and H1 is accepted, so it is concluded that partially there is influence social support against DHF entomology index in the working area of the Pesantren 1 Public Health Center Kediri City.

#### c. The Effect of Motivation on the Entomology Index

Based on the results of Linear Regression analysis, it shows that the p-value is 0.005 <0.05, then H0 is rejected and H1 is accepted, so it is concluded that partially there is motivational influence to DHF entomology index in the working area of the Pesantren 1 Public Health Center Kediri City.

### 2. Simultaneously

Based on the results of the Multiple Linear Regression analysis, it shows that with a p-value of 0.000 <0.05, H1 is accepted so it can be concluded that simultaneously there is influence behavior, social support and motivation towards DHF entomology index in the working area of the Pesantren 1 Public Health Center Kediri City with a magnitude of influence of 71.1%.

## DISCUSSION

### A. Behavior of Jumantik Cadres in the Work Area of the Pesantren 1 Public Health Center, Kediri

The results showed that almost half of the respondents had a good behavior category as many as 52 respondents (44.8%). In addition, a number of 47 respondents (40.5%) had sufficient category behavior. Meanwhile, 17 respondents (14.7%) had poor behavior.

As quoted by Notoatmodjo (2013), behavior is an action or behavior of an organism that can be observed and can even be studied. In general, human behavior is essentially a process of individual interaction with their environment as a biological manifestation that they are living things (Kusmiyati and Desminiarti, 2011). According to the author, human behavior is an activity that arises because of a stimulus and response and can be observed directly or indirectly.

The process of forming or changing behavior can be influenced by several factors both from within and from outside the individual. Aspects within individuals that play a role / influence in behavior change are perception, motivation and emotions. Perception is an observation which is a combination of sight, hearing, smell and past experiences. Motivation is the urge to act to satisfy a need. Encouragement in motivation is manifested in the form of action (Sarwono, 2013).

According to Skinner (2016), formulating that behavior is a person's response or reaction to stimuli (external stimuli). Human behavior from a biological point of view is the action or activity of the human being himself which has a very wide expanse, such as walking, talking, crying, working and so on. The behavior of jumantik cadres is an action taken by jumantik cadres in monitoring the surrounding community in terms of breeding mosquito larvae, especially dengue mosquitoes, as well as conducting socialization to the community in preventing dengue fever outbreaks properly and correctly.

According to researchers the jumantik cadre plays an important role in increasing the larva free rate in an environment where jumantik cadres become promoters as well as motivators for the community in the area. The behavior of jumantik cadres should be carried out by frequently making house visits to routinely slaughter mosquito larvae by carrying the attributes recommended by health workers from the relevant agencies. In addition, Jumantik cadres must be able to conduct socialization every time they visit their homes so that the community does not forget to do 3M plus, even when they find people who do not allow their homes to be monitored, Jumantik cadres can provide directions and explanations about the importance of monitoring mosquito larvae that cause dengue.

Based on the results of the study, it was found that most of the respondents had good category behavior, but there were still quite a number of respondents who had behavior in the less category where respondents when they made home visits were not routinely used, attributes were rarely used even if there were people who refused, the cadres would immediately leaving without trying to convince the person.

### B. Social Support for Jumantik Cadres in the Work Area of the Pesantren 1 Public Health Center, Kediri.

The results showed that almost half of the respondents had good category social support as many as 53 respondents (45.7%). In addition, a number of 48 respondents (41.4%) had sufficient social support. Meanwhile, 15 respondents (12.9%) had less social support.

Social support is information or feedback from others that shows that someone is loved and cared for, valued, and respected, and is involved in communication networks and reciprocal obligations (King, 2012). Meanwhile, according to Ganster, et al., (In Apollo & Cahyadi, 2012) social support is the availability of relationships that are helpful and have special value for the individual who receives it.

Furthermore, social support according to Cohen & Syme (in Apollo & Cahyadi, 2012) is a resource that is provided by other people to an individual that can affect the welfare of the individual concerned. Furthermore, social support according to House & Khan (in Apollo & Cahyadi, 2012) is a helpful action that involves emotions, providing information, instrument

assistance, and positive assessments of individuals in dealing with their problems. According to Cohen & Hoberman (in Isnawati & Suhariadi, 2013) social support refers to the various resources provided by a person's interpersonal relationships.

Family and friends can provide a variety of goods and services in stressful situations. For example, food gifts are often given after the death of the family appears, so that grieving family members will not cook during those times when their energy and motivation are low. Instrumental assistance can be the provision of services or goods during times of stress. Meanwhile, according to Apollo & Cahyadi (2012) real assistance is called instrumental assistance, namely in the form of money and opportunity assistance.

Supporting individuals can also recommend specific actions and plans to assist a person in coping successfully. Peers may notice that their coworkers are overloaded and suggest ways in which they can manage time more efficiently or delegate tasks more effectively. This information aid can be in the form of providing information about stressful situations, such as notification of information regarding test run, and it will be very helpful. Information may be sportsmanship if it is relevant to self-assessment, such as giving advice on what to do. (Taylor, et al., 2014). Meanwhile, according to Apollo & Cahyadi (2012) the intended informative support is in the form of advice, suggestions, direct directions, and information.

In stressful situations, individuals often suffer emotionally and can develop depression, anxiety, and loss of self-esteem. Friends and family can reassure a person who is under stress that he or she is a valued person who is loved by others. Knowing other people care allows a person to approach stress and deal with it with greater confidence. Emotional support in the form of appreciation, love, trust, attention, and a willingness to listen. (Apollo & Cahyadi, 2012). Emotional attention expressed through liking, love or empathy, for example when in a fight with someone who is loved, then the expression of care from friends is very helpful. (Taylor, et al., 2014)

According to the researcher, a jumantik cadre is an ordinary person who sometimes feels like giving up or even getting excited about his job. Where jumantik cadres often have dialogues with people with various characteristics. Sometimes there are people who accept the intention of visiting jumantik cadres well and some even feel disturbed by the visit of jumantik cadres. It is not uncommon for the community to praise or even berate or grumble with the visit of jumantik cadres.

Based on the results of the study, it was found that the social support obtained by jumantik cadres tended to be in the good category, but there were quite a lot of jumantik cadres who considered the social support obtained in the category of lacking. Where this is because the community is less cooperative with the intentions and goals of Jumantik cadres and has even been rejected several times to monitor DHF mosquito larvae.

### **C. Motivation of Jumantik Cadres in the Work Area of the Pesantren 1 Public Health Center, Kediri**

The results showed that almost half of the respondents had high category motivation as many as 51 respondents (44%). In addition, a number of 47 respondents (40.5%) have medium category motivation. Meanwhile, 18 respondents (15.5%) had low category motivation.

Motivation is what causes and supports a person. According to Mashlow (1984) in Sunaryo (2013), individuals will be motivated to meet what needs are strongest in themselves at a certain moment. If it is said that the emergence of a person's behavior at a certain time is determined by a need that has high strength, it is important for every manager to have knowledge of the needs that are felt to be most important to their subordinates.

According to Ngalim Purwanto (2010) motivation is anything that encourages someone to do something. Motivation is to provide a stimulus or impetus or an excitement to a person or group so that they want to work properly and energetically. With the ability to achieve goals in an efficient and efficient manner (Wijono D, 2007).

Meanwhile, Terry GR, giving the definition of motivation is the desire that exists in an individual who stimulates him to take actions. According to Ishak Arep (2013) motivation is something that is essential, which encourages someone to work.

According to Sunarya in the psychology book for nursing (2013), motivation is the desire and need of an individual, to motivate the individual to meet his needs and direct the directed behavior of everything he aims at. According to Nancy Stevenson (2011) motivation is all verbal, physical, or psychological things that make a person do something in response. brought about by the situation and the ultimate goal of the movement or deed.

According to the researcher, the jumantik cadre should carry out their work and responsibilities properly and in accordance with the direction of the person in charge of the program. Which jumantik cadres need encouragement from within themselves, which is related to the motivation of jumantik cadres. Based on the results of the research, it was found that the jumantik cadres tended to have high motivation, but there were still quite a lot of jumantik cadres who had low motivation where this was due to a lack of understanding of the jumantik cadres of the steps they had to take and also the jumantik cadres felt that the wages received were not sufficient. compared to the workload that must be done by these cadres. But even so,

#### **D. Entomology Index of DHF in the Work Area of the Pesantren 1 Public Health Center, Kediri**

The results showed that almost half of the respondents rated their region's entomological index in the medium risk category as many as 51 respondents (44%). In addition, 44 respondents (37.9%) rated their regional entomology index in the low risk category. Meanwhile, 21 respondents (18.1%) rated their region's entomological index in the high risk category.

Demadengue hemorrhagic fever (DHF) is an infectious disease by the dengue virus that is transmitted through the bite of the *Aedes Aegypti* mosquito, characterized by a sudden high fever accompanied by bleeding manifestations and tends to cause shock and death. This disease is one of the most important public health problems in the world in general and Indonesia in particular and often causes outbreaks of Extraordinary Events (KLB) with a high number of deaths (Depkes RI, 2018).

The occurrence of DHF outbreaks is indicated because the vector population, namely the *Aedes aegypti* mosquito, is increasing, this mosquito is an insect that always causes problems for humans, its role as a vector carrier of disease can cause serious problems (Handayani, 2012). This disease attacks all age groups, but most of them are children aged 15 years and under (Kemkes RI, 2011).

Based on AI, an area can be categorized as high, medium and low risk, namely high risk if  $AI > 55$  per 100,000 population, medium risk if AI is 20-55 per 100,000 population and low risk if  $AI = 15$  years. Looking at this data the possibility of transmission is not only at home but at school or at work. So that the PSN movement needs to be encouraged in schools and at work. It appears that there has been a change in the pattern of DHF disease, where previously DHF was a disease in children under 15 years, now it has attacked all age groups, even more so in productive age. It needs to be investigated further about what influences it, whether because the virus is getting more virulent (malignant) or due to other influences. Eradicating mosquito nests (PSN) is the key to success in breaking the spread. But in general, the community does not properly understand the prevention and management of dengue problems. Therefore, providing information related to prevention and repetition is still needed (Liliweri, 2017).

DHF transmission can occur in all places where there are mosquitoes that transmit DHF. Potential places for dengue transmission include dengue endemic areas, public places where people from various regions gather to allow for the exchange of several types of dengue virus (schools, health facilities, hotels, shops, markets, restaurants, places of worship) and new suburban settlements with residents who generally come from various regions (Depkes RI, 2015).

The large number of potential mosquito breeds that are difficult to monitor such as used cans, drums, used tires, tree holes and the use of open holy water containers placed in temples by Balinese Hindus can be one of the risk factors affecting the spread of mosquitoes (Purnama, 2012). The behavior of the community in cleaning mosquito breeding places is not carried out routinely and the number of containers that can be used as water reservoirs, especially during the rainy season, has an impact on the low larvae free rate (ABJ) and the risk of spreading dengue hemorrhagic fever in the environment. Various information obtained by the public about

mosquito breeding sites and dengue fever prevention will influence their attitudes and actions in eradicating dengue fever. So that the evaluation of knowledge,

According to researchers, the index entomology index is a measure of the density indicator of *Aedes aegypti* larvae in a particular settlement which is an important consideration in determining effective vector control efforts. The discovery of mosquito larvae in residents' homes is still quite common, where the highest finding in bathroom tubs and the rank below is the discovery of used goods. From these results it can be concluded that people still often ignore 3M plus which should be done in every home because this DBD vector when growing up can infect several houses around the vector's origin. so it is very important to do 3M plus well and correctly and then also entrust Jumantik cadres to carry out regular monitoring in every corner of the residents' houses.

#### **E. The Effect of Behavior on the Entomology Index of DHF in the Work Area of the Pesantren 1 Public Health Center, Kediri**

Based on the results of Linear Regression analysis, it shows that the p-value is 0.002 < 0.05, then H1 is accepted, so it is concluded that partially there is influence behavior against DHF entomology index in the working area of the Puskesmas Islamic Boarding School 1, Kediri City.

Human behavior is the result of all kinds of experiences and human interactions with the environment which are manifested in the form of knowledge, attitudes and actions. In other words, behavior is a response / reaction of an individual to stimuli that come from outside or from within him. This response can be passive (without thinking, arguing, behaving) or active (taking action). In accordance with this limitation, behavior can be formulated as a form of individual experience and interaction with their environment, especially those concerning knowledge and attitudes about themselves. Active behavior can be seen, while passive behavior is invisible, such as knowledge, perception, or motivation. Some experts differentiate forms of behavior into three domains, namely knowledge, attitudes,

According to the Ministry of Health R1 (2015) the role of health cadres in overcoming DHF is as a member of PJB in homes and public places, providing counseling to families and communities, recording and reporting PJB results, cases of DHF events to the head of the Village / Puskesmas regularly at least every week and months and perform simple PSN DBD.

The role of jumantik cadre behavior in PSN activities is important compared to other factors because these cadres come from communities who are in the same area so that when monitoring larvae the community will trust them more because they already know these cadres. The role of the Jumantik cadre behavior in the success of this PSN DBD activity is that it will motivate the community to carry out mosquito nest eradication activities up to once a week because there are those who monitor the presence of larvae in homes, provide information when there are larvae in people's homes and increase public awareness to always do PSN every week. The impact of the inactivity of Jumantik cadres for PSN and ABJ activities is that it will make the community ignore PSN activities because no one is monitoring,

The role of jumantik behavior is very important in the early alert system of dengue outbreaks because it functions to carry out PJB. Jumantik is a cadre who comes from the community in an area, whose formation and performance monitoring is fully responsible by the district / city government (Kemenkes RI, 2012). Jumantik is in charge of monitoring mosquito larvae from house to house. Direct community participation is PJB activities by jumantik cadres. PJB is the monitoring and inspection of breeding places for *Aedes aegypti* mosquitoes which are carried out regularly by jumantik (Depkes RI, 2015). In the implementation of the Eradication of Mosquito Nests (PSN) Jumantik is equipped with PSN kits in the form of hats, vests, briefcases, stationery, flashlights, pipettes and plastic for larvae and larvacides (Kemenkes RI, 2015).

According to researchers the behavior of jumantik cadres is very important in the success of reducing the entomological index in an area where jumantik cadres must become an extension of the health workers to socialize all programs that health workers direct and also promote the community to care about health, especially breaking the chain of breeding of the *Aedes* mosquito. *Aygepti*. In their respective regions. So it can be concluded that there is an influence behavior

against DHF entomology index in the working area of the Puskesmas Islamic Boarding School 1, Kediri City.

**F. The Influence of Social Support on the Entomology Index of DHF in the Work Area of the Pesantren 1 Public Health Center, Kediri**

Based on the results of Linear Regression analysis, it shows that the p-value is 0.009 <0.05, then H<sub>0</sub> is rejected and H<sub>1</sub> is accepted, so it is concluded that partially there is influence social support against DHF entomology index in the working area of the Puskesmas Islamic Boarding School 1, Kediri City.

Resources provided by others to the individual that can affect the welfare of the individual concerned. Furthermore, according to House & Khan (in Apollo & Cahyadi, 2012) social support is a helpful action that involves emotions, providing information, instrument assistance, and positive assessments of individuals in dealing with their problems. According to Cohen & Hoberman (in Isnawati & Suhariadi, 2013) social support refers to the various resources provided by a person's interpersonal relationships.

The government's efforts to control dengue fever (mosquito larvae) require public participation. Community participation in eradicating mosquito nests needs to be increased, among others, through periodic and continuous larva inspection and mobilizing the community in eradicating mosquito nests (Hendra, 2015). In increasing community participation, jumantik cadres are needed, which are the working group for DHF eradication activities at the village level. The purpose of preparing jumantik cadres is to mobilize the community in efforts to eradicate dengue, especially in the eradication of infectious mosquito larvae so that the transmission of dengue fever at the village level can be suppressed. The number of dengue cases can decrease if jumantik cadres are active in implementing the program (Murniati, 2013).

Research conducted by Rizqi (2013) states that the high and low ABJ are influenced by the participation of the ABJ community that must be increased because high ABJ is expected to reduce the morbidity rate. Dengue Hemorrhagic Fever (DHF) and preventing the breeding of *Aedes aegypti* mosquitoes, effective prevention should be implemented integrally together between the community, government and health workers.<sup>3</sup> The purpose of this study was to analyze the participation of jumantik cadres in an effort to increase the Larva Free Rate (ABJ) at Talang Betutu Health Center.

According to researchers, the jumantik cadre is someone who has direct contact with the community in the area so that they know each other well. However, not all residents have the same characteristics. So that the jumantik cadres will get various responses ranging from flattery and even refusal to be carried out by larva monitors. So that cadres will be very influenced by the response of the community and sometimes it can make Jumantik cadres less active to make visits to residents' homes. So it can be concluded that there is influence social support against DHF entomology index in the working area of the Puskesmas Islamic Boarding School 1, Kediri City.

**G. The Influence of Motivation on the Entomology Index of DHF in the Work Area of the Pesantren 1 Public Health Center, Kediri**

Based on the results of Linear Regression analysis, it shows that the p-value is 0.005 <0.05, then H<sub>0</sub> is rejected and H<sub>1</sub> is accepted, so it is concluded that partially there is motivational influence to DHF entomology index in the working area of the Puskesmas Islamic Boarding School 1, Kediri City.

The Ministry of Health of the Republic of Indonesia (2010) stated that Dengue Hemorrhagic Fever is a disease caused by the dengue virus which is transmitted through the bite of the *Aedes aegypti* mosquito. PSN according to the Ministry of Health of the Republic of Indonesia (2012) is an activity to eradicate the eggs, larvae and cocoons of dengue-transmitting mosquitoes (*Aedes aegypti*) in their breeding grounds with larvicide powder and 3M plus, among others, draining water reservoirs at least once a week, closing water reservoirs, and bury used items that can hold water, and to add to it, put gauze, don't hang clothes, etc. and Larva Free Rate (ABJ) is the number of houses where larvae were not found when surveying mosquito larvae. Eradication of adult dengue mosquitoes is carried out by fogging (Yuri, 2011).



Motivation has a significant relationship with jumantik participation. Motivation is the process of influencing or encouraging from outside a person or work group so that they want to carry out something that has been determined (Syamsudin, 2015). Jumantik who have good motivation tend to be active 4,943 times more than those who have less motivation. In the research results of Murti et al. (2013) states that motivation has a significant relationship with employee work. Research by Sutrischastini et al. (2015) also stated that there is a significant relationship between motivation and one's performance. Employee work motivation is influenced by physical needs, security and safety needs, social needs, self-esteem needs and self-actualization needs (Hasibuan, 2013). The better the motivation of Jumantik, the better the Jumantik is in carrying out his duties. One of the factors that influence motivation is reward. This is in accordance with the Health Motivation Theory put forward by Herzberg, namely factors such as policy, company administration and adequate wages in a job will reassure employees. According to Herzberg, if these factors are met, employee motivation will be good and performance will also be good (Hasibuan, 2013).

Furthermore, it is known that jumantik cadres have different motivations and reasons to become jumantik cadres, jumantik cadres can only provide motivation / encouragement to the community to carry out activities to eradicate mosquito nests to avoid dengue disease (Motivator). Pambudi's research (2014) states that without community motivation it is difficult to participate in all programs. The emergence of motivation must come from the community itself and external parties only stimulate it. Arietha's research (2013) states that the better the motivation, the better the performance, a person's motivation is assessed from 3 variables, namely motivator, initiator, facilitator.

This is supported by previous research which shows that motivation is related to cadre participation. Motivation is the stimulation, encouragement and / or energy generator that a person has so that the person shows certain behavior. Cadres perform tasks voluntarily. Cadre motivation is one of the factors that can influence the activeness of cadres, but it is not uncommon for cadres to find low motivation because they are busy with their daily work (Mesyana, 2013). Most of the cadres' low motivation was because they felt disturbed by their work activities by posyandu activities, while active cadres were motivated to carry out activities because they felt they received benefits and incentives from posyandu activities. Cadre motivation greatly affects the activeness of cadres in carrying out activities. If the motivation of cadres is low, the presence of cadres in activities will decrease so that it can have an impact on decreasing the activity of cadres. The influence of motivation on the participation of cadres and the community determines the success of activities (Utari, 2015).

According to researchers motivation will provide stimulation or impetus or an excitement to a person or group to want to work properly and with enthusiasm. With the ability he has to achieve goals in an efficient and efficient manner. Like the jumantik cadre. However, jumantik cadres whose characteristics are varied will be very common to have high, medium and low motivation. However, there will be factors that cause the motivation of Jumantik cadres to be high, medium or low, one of which is the work wage. Even so, many jumantik cadres work wholeheartedly. So it can be concluded that there is an effect of motivation on DHF entomology index in the working area of the Puskesmas Islamic Boarding School 1, Kediri City.

## CONCLUSION

1. Nearly half of the respondents have a good behavior category as many as 52 respondents (44.8%).
2. Nearly half of the respondents 53 respondents (45.7%) have good category social support.
3. Almost half of the respondents have high category motivation as many as 51 respondents (44%).
4. Nearly half of the respondents 51 respondents (44%) rated their region's entomological index in the medium risk category.
5. There is influence Behavior towards the DHF entomology index in the working area of the Puskesmas Islamic Boarding School 1, Kediri City
6. There is influence social support for the DHF entomology index in the working area of the Puskesmas Islamic Boarding School 1, Kediri City

7. There is influence motivation towards the DHF entomology index in the working area of the Puskesmas Islamic Boarding School 1, Kediri City

## **SUGGESTION**

1. For Respondents

It is hoped that the jumantik cadres will be able to carry out an entomological survey properly, where if they find larvae, they can immediately report them to the relevant parties and immediately provide education to family members in the house so that they can help in the 3M plus efforts and also reduce the incidence of houses with larvae in each. - each working area.

2. For Educational Institutions

It is hoped that educational institutions can use the results of this study as input for learning in the Jumantik cadre analysis of DHF entomology index numbers in the Pesantren 1 Public Health Center working area. Pesantren 1 Public Health Center Kediri City and can be developed again for further research to make it more useful for readers and for researchers.

3. For Further Researchers

It is hoped that the next researchers need to be deepened and added with more specific research on the factors that influence the motivation of Jumantik cadres in increasing the larva free rate in the Work Area of the Pesantren 1 Public Health Center Kediri City.

4. For Puskesmas

It is hoped that the health center can use the results of this study as input for learning to improve the behavior, social support and motivation of Jumantik cadres in fixing the DHF entomology index in the Puskesmas working area. Islamic Boarding School 1, Kediri City.

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## **CONFLICT OF INTEREST**

In this research, there is no interest whatsoever related to myself or with other institutions apart from the Strada Indonesia Institute of Health Sciences, Kediri City.

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