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Community Awareness in Implementation of Mosquito Nest Eradication of Dengue Hemorrhagic Fever (MNE-DHF) Viewed from Paulo Freire's Theory

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Abstract
The main obstacle of efforts to reduce the incidence of dengue fever due to the still not optimal program of Mosquito Nest Eradication (MNE). MNE is unlikely to be completed if community members reached the smallest neighborhood, ie households did not do it. The success of the termination of the chain of transmission of DHF was closely related to the awareness and responsibility of the community to want to maintain the cleanliness of the house and its environment. The main purpose of this research was to describe public awareness of MNE DHF. This research used quantitative description approach. In this study as respondents were people who were in Kamal Village, Kamal Sub District as many as 332 respondents. From the results of the study it was found that most Kamal villagers were at the stage of Naïf Consciousness (Naival Consciousness). It was hoped that the community is in the critical awareness stage (Critical Consciusness) to understand their environment. So it needed health education through Health Literacy to increase knowledge which then would generate critical awareness (Critical Consciusness), so that society could do empowerment.

Keywords: *Community awareness, MNE-DHF*

I. INTRODUCTION

Dengue Hemorrhagic Fever (DHF) is still one of the public health problems in Indonesia. The number of sufferers and the extent of the spreading area is increasing in line with the increasing mobility and population density. In Indonesia, dengue fever was first discovered in the city of Surabaya in 1968, a total of 58 people infected and 24 of them died. Since then, the disease is widespread throughout Indonesia (Ministry of Health, 2010).

World Health Organization (WHO) states Dengue Fever (DF) is still one of the health problems in the world. The number of patients and the extent of the spreading area increases with the increasing mobility and population density. In Indonesia, dengue fever was first discovered in Surabaya in 1968, a total of 58 people infected and 24 of them died. Since then, the disease is widespread throughout Indonesia (Ministry of Health, 2010). DF incidence in Indonesia from 2012-2014 cases of dengue has increased in 2013. In 2014 has decreased cases of dengue fever patients, but the deaths are still relatively high, ie more than 100 people (Ministry of Health, 2014).

Dengue incidence in Indonesia from 2012-2014 has fluctuated. In the year 2013 has increased and in 2014 experienced a decrease in cases, but the dead are still relatively high, ie more than 100 people (Ministry of Health, 2014). Based on East Java Province Health Profile, DHF incidence from 2012-2014, DHF incidence in East Java increased in 2013 and decreased in 2014, but still high compared to 2012 (East Java Province Health Profile, 2012-2014) . By 2015 Bangkalan District is one of five districts in (extraordinary event) EV DHF category in East Java Province. In 2010-2015 the incidence of DHF in Bangkalan District has fluctuated. While the case of dengue fever in Kamal Sub District there in 2013 the incidence of dengue fever is very high, although decreased in 2014. Still high incidence of Dengue Hemorrhagic fever in Kamal Sub District, proving that the spread of virus causes dengue more easily transmitted. Various efforts have been made in the prevention of DHF, and one of them is the Mosquito Nest Eradication Program (MNE).

The Mosquito Nest Eradication (MNE) program has been intensified since 1992. In 2000 it was developed into 3M Plus by using larvasida, maintaining fish and preventing mosquito bites. This PSN was not significantly affected. This is because not all communities are involved in the implementation of (MNE) (Krianto, 2009). The failure to eradicate DHF as a whole can occur because not all societies make efforts to eradicate the vectors of transmission of DDD. PSN is unlikely to be completed when community members reach the smallest neighborhoods, ie households do not do so (Koban, 2005). PSN Practice is said to run well if someone has done PSN activities in the environment of his house on a regular and continuous basis (Notoatmodjo, 2007). The success of the termination of the chain of transmission of DHF is closely related to the awareness and responsibility of the community to want to maintain the cleanliness of the house and its environment. According to Freire (cited Nuryatno, 2008) consciousness is the key that must be owned by the community for change can be achieved.

Community awareness is the key to early dengue fever in a region or region. The most effective way is to avoid mosquito bites by reducing the population. Through awareness of the importance of environmental hygiene, will automatically inhibit the development of larvae, with the concern that the application of efforts to eradicate dengue would be realized, thus would not provide opportunities for mosquitoes to grow. This disease occurs every year in various regions in Indonesia and especially occurs in the rainy season.

Using Freire's human consciousness paradigm, trying to describe people's concern for the environment (Fakih, 2001). Freire theory, is a paradigm that was developed to increase human awareness to be able to identify the problems that exist around. This theory is trying to raise public awareness to care about the problems that occur in the environment. Freire classifies human consciousness into a magical consciousness, naïve consciousness, and critical consciousness. The first phase Magical consciousness (magical consciousness), is a state of a human being is not able to understand the reality around him as well as himself. The second phase, naival consciousness, is the state of consciousness and understanding of the problems that exist in their lives. But they are less able to analyze these issues systematically. The third phase, critical awareness (critical conscientiousness), is the state of a person has been able to think and identify that the problems faced should be examined more deeply. In this stage, the individual is aware that there must be a change. What is expected is that society is at a critical consciousness stage. The variables include knowing the problem, not believing in the power of destiny, understanding the problem, analyzing the problem, having knowledge about the MNE, identifying the problem, understanding the environment, critical thinking and acting.

The most decisive first step in raising awareness is with a continuous process. The process of awareness is the core process or essence of the educational process itself. If a person has been able to attain a degree of critical awareness of reality, that person begins in the process of understanding and not simply memorization process. The person who understands is not a person who memorizes, because the person declares something based on a comprehension, while the person memorizing only states something mechanically without knowing what the person is saying, from which the person has received the person declared recitation, and for what the person reveals at that time.

Herein lies the significance of the words, because the words one expressed at once represent the world of consciousness, the function of the interaction between action and thought. Expressing the right words, in the right way, is to declare words that are consciously or consciously understood, that is where the meaning of understanding reality means to have "praxis", ie, the union of the function of thinking, speaking and doing so that it has a role in Changing the environment. the person's words and actions are not from others, but from the self the person lives in everyday life.

II. METHODS

This study aimed to describe the Implementation of Mosquito Nest Eradication (PSN) 3M Plus in Kamal Village, Bangkalan Regency, East Java Province, Indonesia. This research used quantitative descriptive method, which aimed to describe the variables. The population in this study was the Kamal sub-district of 6,256 people, divided into 7 RWs. Determination of sample size was used tables of Isaac and Michael based on error rate 5% and obtained as many as 332 samples. Data collection was conducted during the period April-June 2016 ..

III. RESULTS

Tabel 1. Respondents Education Level

Last Education	f	%
Elementary school	71	22
Junior Hight School	67	20
Seneor hight School	155	47
Diploma	5	2
S1	31	9
Total	332	100

From table 1 above it could be seen that most respondents had high school education as much as 47%, some other small elementary school education as much as 22% and junior high as much as 20%.

Tabel 2. Employment of Respondents

Work	f	%
Merchants	10	3

Private	37	11
entrepreneur	6	2
Student	11	3
Teacher	3	1
Honorary	2	1
IRT	253	76
Retired	2	1
Civil servants	8	2
Total	332	100

From table 2 above it could be seen that most respondents' work is as housewife, that is as much as 76%, partly as private employee, as much as 11%.

Based on Figure 1 it could be seen that the average majority of respondents were in sufficient category for each of the consciousness stage variables, and almost part of the respondents were in the less category, but only a small percentage of respondents had good category.

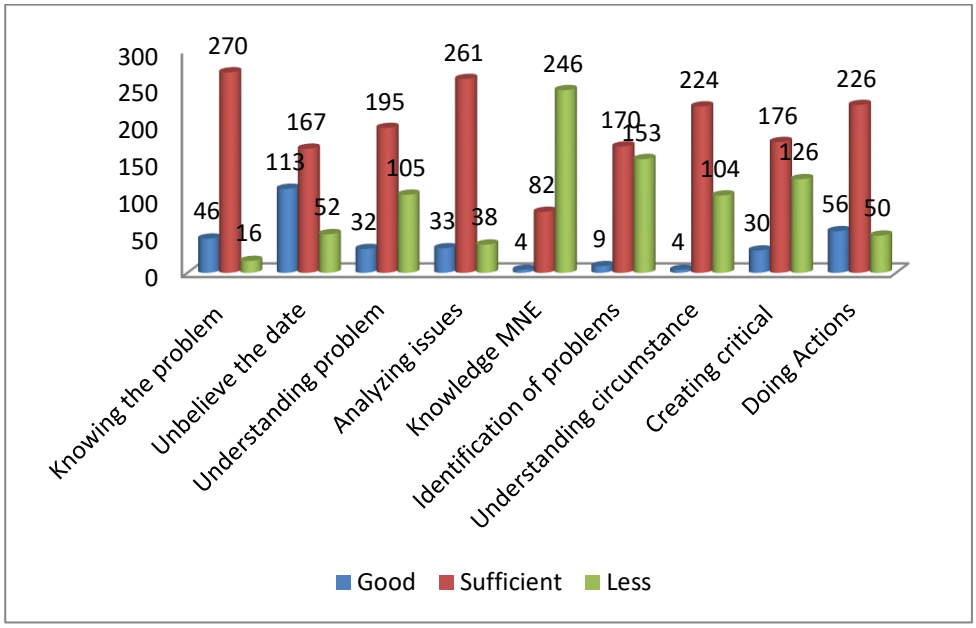

Figure 1. Distribution of Respondents Based on Paulo Freire's Theory Variables

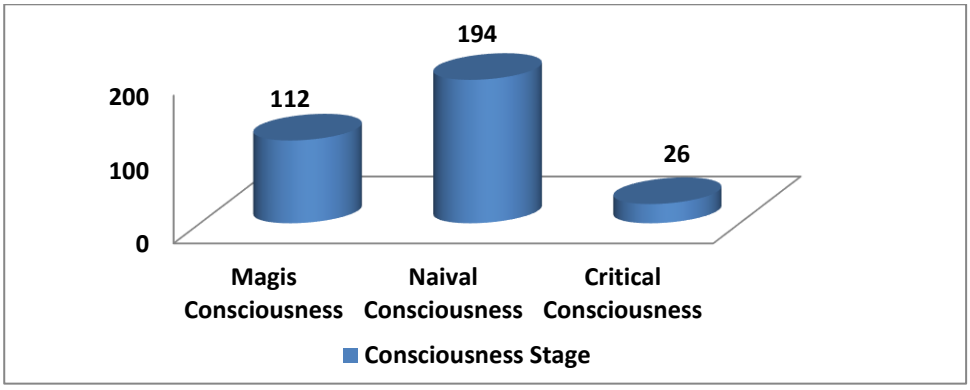

Figure 2. Distribution of Respondents Based on the Paulo Freire Theory Consciousness Stage

Based on Figure 2 it could be seen that most of the respondents were at the naive Consciousness stage, and almost half of the respondents were in the Magis consciousness stage and only a small percentage of respondents in the critical consciousness category.

Magical consciousness with the variable knew the problem and did not believe in the power of destiny. The second stage of naival consciousness, with the variables of ability to understand and analyze problem-related problems

and had knowledge about the problem. The third stage critical conscientiousness, was the ability to identify problems, understand the state of the environment, critical thinking and action.

IV. DISCUSSION

Magical consciousness was that the respondent knows the problem, more believed in the power of destiny. All is God's will. In this study the subject knew about dengue disease and its causes. More believe in the power of destiny, that people who were sick DHF is the destiny of Allah, but must be prevented from happening, let alone to cause death. Kamal villagers had mostly been aware of dengue fever, knowing the characteristics of DHF, the name and characteristics of DHF mosquitoes. People also did not believe in the power of destiny, meaning people believe that dengue fever could be prevented. However if it was trying to be prevented and died then it is destiny. The second stage of naival consciousness, is the ability to understand and analyze issues related to the problem. In this study the subject began to understand the existing problems, namely the subject knows dengue disease and know the cause but had not understood well the cause. The third stage, critical awareness (critical consciouness), was the ability to understand the state of the environment and take action. In this study the subjects were able to identify the problem by knowing and understanding the disease causes and know the prevention of dengue disease. Understand the state of the environment by knowing the relationship of cleaning the environment with dengue disease. Know and understand about PSN which includes draining, closing and burying used goods and 3M plus, as well as implementing it independently and continuously or continuously, as an action to prevent dengue disease even without any supervision from anyone.

From the results of research shows that Kamal villagers were mostly in the category of naival consciousness (naival consciousness). Naival consciousness, is the ability to understand and analyze issues related to the problem. In this study people had started to know about the problems that exist around, but people did not will they do. Kamal village community has the same opinion that DHF is a problem so it must be handled so as not to spread to others, especially if someone died. So if there was a dengue fever should be immediately taken to the puskesmas. However Kamal villagers consider fogging to be effective in solving problems. People were less aware that doing fogging means giving poison to the surrounding environment. The common chemical fogging done in the natural environment was not effective in shutting down the life cycle of Aedes female mosquitoes (Chua, 2005). In analyzing the problem, Kamal villagers know if DHF occured during the rainy season. However, it was not followed by observing the surrounding environment. In Indonesia, the bulk factor had a close relationship with mosquito population rate. In the dry season many used goods such as cans, used tires, plastic cups and the like were discarded irregularly disembarang place. The target of disposal of used goods was in the open like empty land. When there was a seasonal change, from the dry season to the rainy season, most of the used goods became a means of rainwater storage which was a means of breeding Aedes Aegypti mosquitoes. The phenomenon of vacant land became a household waste disposal including potential cans as a breeding ground for mosquitoes (Sayavong et al, 2015).

Society was expected to exist at the stage of Critical Consciousness which was the third phase of the development of consciousness theory Paulo Freire. Critical Counciousness is when one has understood critically, self-exposed and does not view the world as a static reality (Freire, 2008). Freire further explained that a person was claimed to have a critical awareness when able to identify problems, understood the state of the environment, act critically, and take action. A deep critical awareness of the situation, would bring people to understand the situation as a reality that can change. According to Minkler, Wallersstein and Wilson (2008) Critical Counciousness was awareness based on reflection and action in making changes. Critical awareness was demonstrated through respect, contextual and integrated knowledge with an emphasis on empowerment (Godman, et al, 2015). At this stage, the individual gained awareness that there must be a change. They also understood his situation and understand the circumstances of his environment. That understanding was obtained through a dialogical process which was then followed by action. In addition, with a deep critical awareness of the situation, would bring people to understand the situation as a reality that can change. With a critical awareness capable of thinking and acting critically, more confident, and open to the ideas of others. Someone had reached the level of Critical Counciousness, then he began to enter the process of understanding and not memorize, then understand the situation and then take action. With Critical Consciousness the community will understand its environment (Freire, 2008). Critical Consciousness would encourage individuals to care and take responsibility for their environment (Mustakova and Possardt, 1998). With Critical Consciousness there was a change in every individual (Darlington, et all 2015).

From the second phase, naival consciousness to the critical conscientious phase was achieved through the educational process (Nuryatno, 2008). Through the educational process, it was hoped that the community would have a higher level of awareness in order to empower individuals, especially in health. Based on the results of the study, the need for health education efforts to increase public knowledge about DHF and MNE. The development

of knowledge raises the development of critical awareness that allowed the community to provide empowerment (Goodman, and Cirecie, 2009). Health education can play a role in providing input and encouraging communities to take responsibility and participate in preventing and controlling DHF (Ibrahim et al, 2009). According to Sayavong et al (2015) health education encouraged community participation in terms of handling larvae vector. It was important for health workers to consider information that was not yet known and needed by the community. The needs of the people of a place would be different from the people in other places. It really depended on their background. Increasing knowledge through different educational programs,were as needed needs to raise awareness in preventing DHF (Bota et al, 2014). Health promotion was an effort to change people's behavior, lifestyle and quality of life through better individual and environmental changes (Fertman and Allensworth, 2010). The global strategy of health promotion included empowerment and community participation (Center for Promotion of Health MOH RI and UI, 2009). Health promotion through health education on DHF could be provided by increasing knowledge through Health Literacy. Health Literacy was raising awareness that would result in behavior-oriented prevention. By increasing knowledge through Health Literacy was expected to empower individuals in terms of health. Nutbeam (2006) said that Health literacy had been recognized as one of the determinants of health and became one of the goals of community health development. Health literacy was the ability to obtain, process, and understand basic health information and health services aimed at making the right health decisions, has developed into a health status contributor (Nutbeam, 2006). Health literacy describes cognitive abilities and social skills that could be interpreted as the motivation and ability of individuals to access, understood and used information in terms of maintaining health. MNE-DBD's Health literacy capability was the basis for behaving independently in reducing dengue cases.

V. CONCLUSIONS AND SUGGESTIONS

From the results of the study could be concluded that:

1. Most Kamal villagers were at the stage of Naival Consciousness. Naival consciousness, was the ability to understand and analyze issues related to the problem. In this study people had started to know about the problems that existed around, but people let it.
2. Kamal villagers had the same opinion that DHF was a problem that must be addressed so as not to spread to others, especially if there were people who died. So if there was a dengue fever should be immediately taken to the puskesmas. However Kamal villagers considered fogging to be effective in solving problems. People were less aware that doing fogging meant giving poison to the surrounding environment.
3. In analyzing the problem, Kamal villagers knew if dengue occured in the rainy season. However, it was not followed by observing the surrounding environment.
4. It was hoped that the community is in the critical awareness stage (Critical Consciusness) to understand their environment.
5. Based on the results of research, the need for health education efforts through Health Literacy to increase knowledge which then would generate critical awareness (Critical Consciusness), so that the community was able to do empowerment

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