

Critical Consciousness of Madurese Society against Implementation of Mosquito Nest Eradication as Vector of Dengue Fever

Firdausi Ramadhani¹, Ririh Yudhastuti², Sri Widati³

¹Doctoral Student at Faculty of Public Health, Airlangga University, Indonesia

²Lecturer at Department of Environmental Health, Faculty of Public Health, Airlangga University, Indonesia

³Lecturer at Departement of Health Promotion and Behavioral Science, Faculty of Public Health, Airlangga University, Indonesia

Abstract

The main obstacle of efforts to reduce the incidence of Dengue Fever because it still has not optimal program of Mosquito Nest Eradication (MNE). MNE is unlikely to be completed if community members reach the smallest neighborhood, ie households do not do it. The success of the termination of the chain of transmission of DF is closely related to the awareness and responsibility of the community to want to maintain the cleanliness of the house and its environment. The main objective of this study was to analyze Critical awareness of MNE-DF. This research used a qualitative approach by using case study method. The case study in this study focused on MNE-issues. In this research as the informant actors are housewives who are in Kamal Village, Kamal District and Puskesmas officer. Using Model Miles and Huberman's analysis, it was found that the subject's knowledge of MNE was still low. Research subjects are also more aware of the distribution of abate and fogging to address cases of dengue. In addition, the subject of research has never followed the counseling about DF and MNE. So far, information is obtained based on personal experience and mass media. To prevent dengue they do by maintaining cleanliness, draining the tub, cleaning up puddles and burying used cans. However the subject did not take other MNE actions on an ongoing basis.

Keywords: Critical consciousness, Madurese society, Mosquito nest eradication, Dengue hemorrhagic fever

I. INTRODUCTION

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).

The main obstacle of efforts to reduce the incidence of dengue hemorrhagic fever because it still has not optimal program of Mosquito Nest Eradication (MNE). MNE is unlikely to be completed if community members reach the smallest neighborhood, ie households do not do it. 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. Suyatno (2003) points out that in the framework of community participation that is necessary to increase critical awareness of the position of society in the socio-political structure. The critical awareness aspect is a vital activity in which people are encouraged to think critically in view of all issues. Critical awareness is characterized by the ability to define the problem, the ability to understand the problem and be able to do what it should be done (Smith, 2001). Freire (2008) explains that a person is claimed to have a critical awareness when able to identify problems, understand environmental circumstances, act critically, and take action.

Ridwan (2013) explains that Critical Consciousness is important to understand their environment. 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 Consciousness is awareness based on reflection and action in making changes. Fakhri (2001) explains that if a person had reached the level of Critical Consciousness, then he begins to enter the process of understanding and not memorize, then understand the situation and then take action. With Critical Consciousness the community would understand its environment (Freire, 2008). Every individual would experience a change if it had had Critical Consciousness (Darlington, et al 2015).

II. METHODS

This study aimed to analyze Critical awareness of MNE-DF using P. Freiri awareness theory. This research used qualitative approach by using case study method. The case studies in this study focused on MNE issues. In this research as the informants are housewives who are in Kamal Village, Kamal District and social health center officer. Data were collected through in-depth interviews with 18 Kamal Village housewives, 1 community leader and 1 officer of social health center . Data collection was conducted during the period of April-June 2016.

III. RESULT

A. Characteristics of Informants

The subjects were 18 families, with details of 8 families having members who had suffered DF and 10 families had no members who had suffered DF. The 18 families were taken from each different area.

B. Ability to Identify Problems

a. MNE Knowledge is still low

Based on interview results, it is known that almost all subjects do not know MNE. The second subject said that he did not know about MNE. The subject said he had heard but forgot, as shown in the following interview passage:

"..... what is MNE sister .. ??? Right sister. What is MNE? There's never any counseling. So do not know PSN "(JU0511SBK02, 34 th)

Likewise with the third subject who claimed that have never heard of MNE on the grounds there is no counseling. Not much different from the fourth subject claimed not to know about MNE. Likewise with the fifth subject who claimed not to know about knowing the term MNE.

While the ninth subject may mention the term MNE though incomplete. He also informed if his house has never been jumantik who came. In contrast to the first subject who knew about MNE when becoming a member of Jalasenastr, as shown in the following interview passage below:

"..... I know MNE yes as a member in Jalasenastr. If counseling from social health center about MNE I never heard. It does not look like there in the village. I do not know anymore elsewhere. All I know is MNE is draining, burying and closing. I've heard jumantik. But what it is sister if not wrong that check larvae in the bathroom? Just do not know the meaning larva monitoring officer (jumantik). Just a social health center officer"(MA0311SBK01, 43 years old)

b. Subjects Argue That Fogging Is Effective To Overcome MNE

In identifying the problem, the research subjects mostly argued that that the distribution of abate and fogging to address dengue problems. The first subject states if fogging can be used to prevent MNE. As shown in the following interview below:

".... Usually also prevents the dengue fever with spray and abate. And I think that spray can prevent dengue fever. So it is better to prevent sister"(MA0311SBK01, 43 th)

If there is a sick usually there is a spray directly from the village or social health center. If not, then the people usually conduct their self-financing by paying a joint venture. This is stated by the third subject and the sixth subject, as shown in the following interview passage below:

".... Preventing also sprayed. there is usually a spray from the village or social health center. If there is a sick MNE then if not from the village or social health center usually people joint venture to hold their own spray .. "(KA1211SBK06, 43 th)

Most research subjects had the same opinion if fogging is an effective way to cope with DF. They did not mind if they had to pay to get fogging. They voluntarily or self-help fogging if they had dengue fever. They did not know if fogging has a bad impact on health if it is too often used.

c. Society Need Information About DF and MNE

From the results of other interviews, obtained information if the subject of research had never followed the counseling about DF, MNE. According to those counseling it is necessary for the public to get information about

DF, MNE and larva monitoring officer (*jumantik*). According to the first subject 1 during his stay at Kamal, he has never been counseled. However he did not know whether in another area there was a consultation about DF. According to him the counseling needs to be done so that people know information about DF and MNE. As shown in the following interview below:

".... Counseling ?. As long as there has never been any counseling. There is no sister. That's why I asked larva monitoring officer (jumantik) I do not know. Supposedly counseling is necessary. Yes let people know what is DF and MNE"(MA0311SBK01, 43 th)

d. The ninth subject said if his residence has never been counseled.

However he said he did not know if in another place. According to him the counseling is important so that people know more information about DF and MNE. As shown in the following interview below:

"..... there is no counseling. So if I know it is from television and told by people. However MNE does not know what it has never been counseling. Yes it should be necessary, let us know "(RO0912SBK09, 36 th)

C. Understanding Environmental Conditions By Maintaining Cleanliness To Prevent Dengue Fever

From the interviews of research subjects have the same opinion in preventing DHF is by maintaining cleanliness, draining the tub, clean up puddles and bury the used cans. Some argue that preventing DHF can use both fire and spray mosquito repellent. According to the the second subject ways to prevent the occurrence of DHF is to clean the places where there are puddles. As shown in the following interview below:

"..... how to prevent it is not until there is a mosquito. So it must be cleaned so no mosquitoes. I know the places where there is water. Like the sticks and cans also if I'm wrong "(JU0511SBK02, 34 th)

The third subject in terms of prevention of Dengue fever had different answers. According to him prevent the dengue fever can use anti-mosquito spray drugs. He sprayed every room in the bathroom house. In addition, by cleaning the bathroom and cleaning the yard. As shown in the following interview below:

"... I usually use sprays. All the corners of my house spray. The shower also I spray. However I also drank the water bath. I also clean the page. Trash I used to burn at the curb. Sometimes I throw it into the sea. If I used bottles and cans to people. There are just ask for sister, so not up to pile .. "(SA0711SBK03, 53 th)

For the prevention of DF by the ninth subject cleaning the bathroom routinely, and use fogging so as not to spread to others. As shown in the following interview below:

"..... If I clean my bathroom routine. Same spray. Usually there is a spray if there is a dengue fever. So it did not infect others ... "(RO0912SBK09,36 years)

The tenth subject argues as for preventing DHF is done by cleaning the house from garbage, bushes, not hanging clothes and better if using anti mosquito repellent. As shown in the following interview excerpt:

"..... How to prevent it is the garbage must be cleaned. Do not hang any clothes. There are no bushes. It should be clean anyway. Also use spray mosquito repellent. However there is also a spray from the social health center or village "(QU0401SBK10, 25 th)

Based on the results of the interview, the research subjects argued that preventing DHF can be done by maintaining cleanliness of the environment. However, based on observations, the subject of environmental hygiene research only focused on the activities of landfill partyihakn in the bathroom and landfill for cooking. Assuming, if the bath drained once a week Dengue mosquitoes are not around the house. However the subject is less attention to the surrounding environment. Though keeping the environment clean around the house can also prevent the proliferation of mosquitoes cause dengue fever

D. Acting Critically By Learning From Experience

Based on the results of the interview is known if the subject knows about DF based on personal experience. The fourth subject who has experience ever experience dengue fever, always pay attention to information related to dengue. Even sometimes he shared the information to other people who do not know the information about DF. Like the following interview excerpt:

".... Yes that was what I said, if I was sick until hospitalization in hospitals. Since I was sick it became understand about DF. Understanding the sign, the cause. Anyway about my dengue so know, yes although not everything. So every time there is news about DF as I read. I keep knowing about DF. I sometimes also ngasi know to others. For sharing experiences hehehe "(NU0811SBK04, 30 th)

Not much different from the seventh subject that her child had experienced dengue fever. When his son was sick, he searched for information about the dengue fever. Both through television and mass media. As revealed in the following interview excerpt:

"... When my child gets sick, I often wonder people. Ask the clerk and people whose children have been sick DF. Reading newspaper, television. So ya know. Know the symptoms of dengue, know how transmission and also know the cause. This is important. Yes so that my child did not get sick anymore. That's why I cover the front, because I think it must have been because my son got sick. If there is a neighbor whose child is sick, I know. Sorry sister if when a child was getting any sick can make confused "(K11311SBK07, 43 th)

But it is different from the subject of research that family members did not experience dengue fever. They actually get information from people whose family members have suffered from DHF. As disclosed by subject 3. He received information about DHF at the time of gathering with neighbors whose family members have had dengue fever.

".... Yes usually if there is a gathering with neighbors, or there is a pain continue of DF. Yeah I got to know ... "(SA0711SBK03, 50th)

So it is with the fifteenth subject. He often gathered with neighbors. Usually neighbors whose children or their families have had dengue fever, often recount their experiences. From them he knows about DF, as in the following interview passage:

".... with mothers if more get-togethers told the stories. Moreover, his brother had been sick DF. So it can be known "(SU1001SBK15, 45 th)

Based on the results of the above interviews, there are different research subjects in obtaining information about DF. Research subjects whose family members have had dengue fever, will try to find information about dengue. Instead research subjects whose family members have never had dengue fever, get information from people whose family members have had dengue fever.

E. Do Not Perform Sustainable Action Dependently

a. Do not Clean Water Shelter Behind Refrigerator Continuously

Based on the results of the study the entire study subjects did not have a regular schedule to clean the water reservoir behind the refrigerator. The waste water behind the refrigerator will be discarded when it is full and flowing to the floor. The researcher says often forget to clean the water reservoir behind the refrigerator. Remember after the water spilled onto the floor. Many research subjects who do not know that the refrigerator water reservoir has potential as a breeding ground for mosquitoes. As shown in the following interview excerpt:

"... That I also clean but not routine. If it had been cleaned. So it means not routine every week. Yes I've read if it could be a place where mosquitoes lay eggs. However it often forgets to clean. If you've just remembered a lot ... "(NU0811SBK04, 30 years old)

b. Subject Hanging Clothes In The Room

Based on the findings in the field, most research subjects had a habit of hanging clothes in the rooms at home. They reasoned if the clothes are hanging is a newly worn clothes and would be used again. Although in fact they know that hanging clothes can be a mosquito's nest. As shown in the following interview below:

"... I used to hang clothes after wearing. Not necessarily sister. If I want to use again, hung in the room. Sometimes also folded. Sometimes there are mosquitoes. therefore to tell where the place else. But if not, it will be in the washing ". (NU0811SBK04, 30 years old)

c. Subject Less Keep Maintain Neighborhood Environment

Based on observations and interviews found the subject of research is less to keep the environment clean around the house. Some research subjects were still happy to store used goods collected. If it was a lot then it would be sold. They did not realize that these goods can be a means of breeding DF mosquitoes.

While other subjects waited for the work of devotion with the learder of area and the surrounding population to clean the front ditch of the flooded house. The reason was because the gutter belonged together. He felt the difficult to clean the environment in front of his house, because the ditch in front of his house was also used by other residents to dispose of household waste, so feel wasteful if cleaned after cleaning would be dirty again. So also with some subjects who lived in densely populated area. There was a puddle of former water, not only from their homes, but also from neighbors. This was because their houses did not have a yard, so drying the laundry in front of the house.

d. Subject Not Using Mosquito Wire In The Wind Hole At Home

Based on the observations found that the vents in the home of the study subjects all did not use mosquito netting wire. When that is confirmed, the subject justifies the matter by reason of having used anti-mosquito medication at night. To overcome the mosquitoes that entered the house, the subject used a mosquito repellent sprayed every night before bed and sometimes using anti-mosquito coils. As in the following interview below:

*"... Not every day there are many mosquitoes, if many mosquitoes are sprayed with baygon".
(KA1211SBK06,43 th)*

e. Subjects Do not Sprinkle Abate Powders Into Water Shelter

Based on the results of the interview also found if people did not sow abate powder on water reservoirs. They sprinkle abate powder if the officer gives it for free. However if there was no free distribution, then he did not put abate into the bath. As shown in the following interview below:

"... So I sometimes give abate. Just because it has to buy, so yes rarely. it must not buy. Usually it's free ... hehehe .. "(JU0511SBK02, 34 th)

IV. DISCUSSION

Critical Consciousness was the third phase of the development process of consciousness of Paulo Freire's theory. Critical Counciousness when one had understood critically, self-exposed and did not view the world as a static reality (Freire, 2008). Freire further explains that a person was claimed to have a critical awareness when able to identify problems, understand 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 consciousness was awareness based on reflection and action in making changes. Fakhri (2001) explained that if a person has reached the level of critical consciousness, then he began to enter the process of understanding and not memorizing, then understood the situation and then take action. Critical awareness was demonstrated through respect, contextual and integrated knowledge with an emphasis on empowerment (Godman, et al, 2015). Freire (2008) mentioned there were several parameters of critical counciousness, which was able to identify problems, understand the state of the environment, acting critically and taking action.

The results of this study indicated that the subject knowledge about MNE was still low. Research subjects were also more aware of the distribution of abate and fogging to address cases of dengue fever. In addition, the subject of research has never followed the counseling about DF, PSN. So far, information was obtained based on personal experience and mass media. To prevent dengue fever that they did by maintaining cleanliness, draining the tub, cleaning up puddles and burying used cans. However the subject did not take other MNE actions on an ongoing basis. The main problem was the high number of DHF incidence due to the people's understanding of DF and prevention was still lacking. Then this results in less precaution as well. Based on the observation, not all people did MNE 3M Plus activities in full. The community is more confident in the use of *fogging*. There were still many people who believe if fogging can overcome the problem of DHF. People did not realize that fogging also has a bad impact, not only for the environment but for themselves (Ramadhani, 2015).

Chua in *the Singapore Medical Journal* (2005), explained that the usual chemical fogging done in the natural environment was not effective in shutting down the life cycle of Aedes female mosquitoes. Other problems that had also been studied are exposure to this malation resulting in kidney failure, newborn disorders, gene and chromosomal damage to the baby in utero, lung damage, and decreased immune system. Incomplete MNE 3M

Plus actions related to their inadequate knowledge and understanding. The low implementation of MNE showed that the community did not understand the environment. A low understanding of an object could inhibit the formation of Critical Consciousness (Pitner and Sakamoto, 2005). With Critical Consciousness the community would understand its environment (Freire, 2008). Ridwan (2013) explained that Critical Consciousness was important to understand about the environment. 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 al 2015).

Based on the results of the study, the need for health education efforts to increase public knowledge about DF and MNE. The development of knowledge raises the development of critical awareness that allows 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 encourages community participation in terms of handling larvae vector. It was important for health workers to consider information that has 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 was as needed needs to raise awareness in preventing DHF (Bota et al, 2014). Control efforts that had been done the results that had been as expected. For that it needs more intensified by giving community knowledge of the method of controlling the DHF vector that could be done independently, such as the implementation of the MNE 3M plus correct. Health promotion is 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 DF can be provided by increasing knowledge through Health Literacy. Health Literacy is raising awareness that would result in behavior-oriented prevention. By increasing knowledge through Health Literacy is expected to empower individuals in terms of health. Nutbeam (2006) says that Health literacy has been recognized as one of the determinants of health and became one of the goals of community health development. Health literacy is 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 described cognitive abilities and social skills that could be interpreted as the mativation and ability of individuals to access, understand and use information in terms of maintaining health. MNE-PF's Health literacy capability is the basis for behaving independently in reducing dengue cases.

V. CONCLUSION AND SUGGESTION

From the results of the study can be concluded that:

1. Critical Conscience needs to be nurtured so that people understand their environment.
2. Critical Conscience would make changes to each individual
3. It needs Health Literacy to increase knowledge which would generate critical awareness (Critical Consciousness), so that society can do empowerment

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