

The Role of Health Workers and Community Leaders to Prevent Dengue Hemorrhagic Fever In Magetan, East Java

Dimas Abdullah Marha Putra¹⁾, Mohammad Zainal Fattah^{2,3)}, Winarko⁴⁾

¹ Epidemiological Control and Surveillance, Surabaya Class 1 Port Health Office, Sidoarjo, Indonesia

² Indonesian Society on Health Promotion and Education, Indonesia

³ Department of Health Promotion and Behaviour Science, Faculty of Public Health, Universitas Airlangga, Surabaya, Indonesia

⁴ Health Polytechnic, Ministry of Health, Surabaya, Indonesia

Email: dimas.abdullah.marha-2017@fkm.unair.ac.id

ABSTRACT

Background: Dengue hemorrhagic fever (DHF) is still one of the major public health problems in Indonesia. With the increasing mobility and population density, the number of people and vast distribution area are increasing. Village of Tawanganom is one endemic region, for three consecutive years, there is an incidence of dengue. The incidence of dengue can be influenced by several aspects, including vectors, climate change, environment, mobility of people, and people's behavior. The participation of health workers and community leaders become important related behavior. These include the role of motivation, coordination, policy implementation, as well as healthy behaviors. **Objective:** This study aimed to determine the role of health workers and community leaders in response to the incidence of dengue in the Village Tawanganom. **Methods:** This research was qualitative study by phenomenological approach. Data was collected by in-depth interviews. The number of informants were 13 peoples. Consisting of health professionals that the holder of dengue program, Health Promotor, and village midwives, community leaders the Head of the village, RW, as well as health cadres. **Results:** The motivation of public figures came from the concern over them because of the many cases of DHF and personal experiences of informants and families. Health workers motivate people to do counseling, which was supported because of responsibility as health professionals. Coordination has been made with the relevant sectors. Reporting cases of executed massively and focused. Implementation of policies in the prevention of dengue fever has been carried out based dengue prevention program Magetan District Health Office. Healthy behavior is shown with dengue prevention measures such as 3M Plus, giving abate powder in the bathroom, as well as maintaining the cleanliness of the home environment. **Conclusion:** The motivation to do a public figure driven intrinsic motivation of the individuals themselves, while medical personnel with extrinsic motivation based on the responsibility as health workers to encourage people to do the prevention of dengue. Coordination has been carried out massively and regularly within the scope of cross-fertilization. Implementation of policies based on the program of the Health Service Magetan. Healthy behavior implemented preventive and promotive measures.

Keywords: Community Leaders, Dengue Hemorrhagic Fever, Health Workers

INTRODUCTION

Dengue hemorrhagic fever (DHF) still becomes the public health problem in Indonesia. Dengue is a disease caused by dengue virus that can be transmitted by the mosquito *Aedes aegypti* and *Aedes Albopictus* (Monintja, 2015). Cases of dengue fever in Indonesia was discovered for the first time in 1968 in Surabaya and Jakarta. Until today, the case of dengue fever experiences fluctuation that tends

to increase. In 2011, as many as 65,725 cases, 90,245 cases in 2012, 112,511 cases in 2013, 100,347 cases in 2014, 129,650 cases in 2015, 204,171 cases in 2016, 59,047 cases in 2017, and 65,602 cases in 2018 (Indonesian Ministry of Health, 2018). Recorded up to February 3rd, 2019, there were as many as 16,692 DHF patients and 169 patients were pronounced dead. Based on these data, East Java was ranked first in cases of

dengue (Indonesian Ministry of Health, 2019).

Magetan is the district with the highest number of CFR third with a percentage of 4.0% similar to the Bojonegoro, with targets in East Java CFR <1% (East Java Province, 2018). Data from the Magetan Primary Healthcare or *Puskesmas* Magetan showed the incidence of DHF in Magetan occurred from 2013 to 2017 (Magetan District Health Office, 2018). DHF incidence factors included host factors, environment, and agent. The factors causing DHF are geographical conditions and the demographic. The geographical conditions are including weather and climate, drainase basin. while the demographics conditions are including population density, mobility, people's behavior, and also socioeconomic population (Purwaningrum, Widyanto and Widiyanto, 2016). DHF does not only affect the infected individual clinically but also affect socio-economic condition of the society. Therefore, the prevention cannot only be handled by the health sector, but also requires an active role from the society, across sectors, local governments, especially at the district/city level (Tairas and Posangi, 2015).

It is expected that the health workers as the 'extension' of the government, can prevent DHF incidence in the society. Health workers have a role in improving and managing health. In accordance with research by Pitriani which stated that there is a relationship between the role of health workers and the use of the Intrauterine Device (IUD) (Pitriani, 2015). The role of health workers is important in the prevention of dengue fever, according to research by Chasanah, that the role of health workers can affect maternal mortality. Also, health workers have a role in the mobilization of cadres (Chasanah, 2015). The role of health workers on DHF is to motivate behavioral change (Widiyaning, Syamsulhuda and Widjanarko, 2018).

Furthermore, cadres have a role in the success of society mobilization, because the presence of cadres in society is better known in the environment. Cadres are a part of society leaders. Society leaders also play a role in success in handling the incidence of DHF, since they have the

power to awaken and guide the society to carry out DHF prevention activities. Along with research on the success of the Routine Larva Monitoring or *Pemantau Jentik Rutin* (PJR) in increasing the Larva Free Number or *Angka Bebas Jentik* (ABJ), one that has a relationship is support from the head of local society (*ketua RT*) so that it can improve the performance of PJR (Utami, Nugraha and Husodo, 2018). Society leaders in this study were head of urban village or *ketua RW*, *ketua RT*, and the health cadres.

The role of health workers and community leaders will have an impact on changes in community behavior in DHF prevention. The participation of health workers and community leaders can be demonstrated by motivation, coordination and policy implementation.

Motivation is an effort that can encourage someone to take the desired action, including by giving direct encouragement to the society to take more personal actions to prevent dengue. In addition, it can also provide an appeal to the society to check the existence of larvae in bathtubs, water reservoirs, and standing water in the home environment (Yusuf, 2014). Coordination as a unification of each part and harmonizes business or activities along with their operations so that they can make the maximum contribution to the success of cooperative efforts, coordination activities that can be carried out include holding meetings to discuss DHF prevention plans. Policies can be derived from an actor or group of actors that includes a series of programs/activities/actions with the specific purpose (Ramdhani and Ramdhani, 2017), with the policy of the authorities in this regard, are stakeholders (local mayor or *kepala desa*, *ketua RW*, and *ketua RT*) it will encourage people to take preventive measures and control of dengue.

Tawanganom village is one of the villages in Magetan from the total 14 villages. There is always dengue incidence recorded annually in Tawanganom. Starting from the year 2012 with only 1 case, 3 cases in 2013, 1 case in 2014, 2 cases in 2015, 4 cases in 2016, 2 cases in 2017. It showed that Tawanganom is a dengue-endemic area.

The participation of health workers and society leaders in dengue incidence mitigation needs assessment. Therefore, there should be a study to determine how the role of health workers and society leaders in the response to dengue incidence in Tawanganom village, Magetan.

METHOD

This research was qualitative study with phenomenology approach. The location in Tawanganom, Magetan East Java same as researcher stayed so the informations can collect comprehensively. Data collection and analysis by researcher. Data collect by in-depth interviews with the total of 13 informants. The analysis using content analysis. The study was conducted from March to November and data collection was done in November.

In-depth interview for health care workers and society leaders conducted by the researchers in the form of open-ended questions consisted of 13 questions related to the role of health workers and community leaders in dengue prevention activities in Tawanganom. Within one month, the interviews were conducted approximately 30 to 45 minutes per respondent.

Informants in this study were health workers and workers responsible for the health promotion dengue program at the puskesmas and the Health Department Candirejo Magetan, Tawanganom village midwives, and society leaders in Tawanganom, Magetan. Comprised of society leaders such as *ketua RW*, *ketua RT*, as well as health workers, because they have the authority and have responsibility to people in their environment.

Primary and secondary data were collected. Primary data collection was carried out by researchers using in-depth interviews with all informants assisted by interview guides and recording devices to make it easier for researchers to collect data, and secondary data was obtained from documentation studies in the form of data records contained in related institutions. After the data was collected, data analysis was carried out including data reduction, data presentation, drawing conclusions, and verification. The validity of the data in this study used the source triangulation method, namely

by comparing and checking the degree of confidence of information obtained through different time and tools. The data obtained from in-depth interviews with each informant will be compared with the key informants.

RESULT AND DISCUSSION

Motivation in DHF Prevention

Starting from the concerns of several informants from each individual, they agreed that DHF is a dangerous and deadly disease. Therefore, they started to be vigorous and not discouraged in inviting and controlling DHF. Starting from inviting individually to groups. Personally and communally. The following are some of the results of in-depth interviews with informants:

"Concern mas (bro), although not from our families. We'll usually when our citizens, we visit the hospital to his home. Usually suggest what to eat, how to overcome DB let not hit again." (Informant 7, society leader, 32 years old)

"Yes, from that I am also concerned about the carp if there are one or two of our citizens affected by the outbreak. I advocate for mosquito eradication, if any tin cans, or places the puddle, we'll need to drain, or flipping the goods." (Informant 8, society leader, 44 years old)

But there was another informant who is engaged under the direction of superiors. If there was new command, they would execute it. As for dengue prevention activities were done according to the situation, only when there was a new move of their case.

"...I guess for the people, it is always welcome the movement of the local government or of the health office in which to implement the prevention program, it only supports its citizens." (Informant 9, society leader, 57 years old)

Most informants in this study, especially society leaders to motivate citizens when routine gathering activities in the environment, such as gathering RT, RW social gathering, Empowerment Family

Welfare or *Pemberdayaan Kesejahteraan Keluarga* (PKK), even when to help in one of the residents who have special events (*rewang*). There were indeed using an arbitrary to make the lines of the dengue prevention activities to the people. The appeal to their people could directly carry out the dengue prevention activities in their environment. Based on some of the informants was an appeal is always carried out by the people, especially when closely rainy season.

"...yes, when meeting, the first in RW, both at RT, so when we walk mas, met there to chat. Mas ya lah chat anyway, so just continue to let go in later let them be concerned. Occasionally fitting condolence, we talk pass so, yes we gave inputs related to dengue prevention activities. Rewang-rewang time so we yes provide input so to them ... usually me when fitting gathering RW mas remind mothers especially when approaching the rainy season so, wes I do not feel sick marine mas ki lek jueh." (Informant 13, society leader, 49 years old)

"We make a circular letter to the PKK, to RT RW, to do service projects and keep the environment clean." (Informant 5, society leader, 36 years old)

Health workers often provide motivation to do the prevention of dengue during PJR, giving counseling in the Posyandu and activities that are invited from the clinic or health department.

"Our role as health workers, we are also counseling in communities, in Posyandu about dengue. if counseling is often lo mas in fact, now there we usually also asked that people want to carry out activities of prevention and control of dengue mas. " (Informant 1, the health worker, 49 years old)

Health workers do motivation based on external encouragement. The external encouragement is in the form of the main duties of health workers who are responsible for their work as health workers, so that it will encourage health workers to make calls and appeals to residents in handling the incidence of DHF.

Activities to motivate residents to carry out the prevention of DHF carried out by health workers and community leaders in Tawangnom village are invitations, appeals, and providing information related to DHF prevention.

Based on the research results, it was known that the motivation of society leaders originated from the concern of each individual. This sense of concern will trigger society leaders to encourage people to prevent dengue fever from occurring. According to Afrian, Widayati and Setyorini (2016), individual motivation is influenced by intrinsic and extrinsic factors, intrinsic factors originating from within the individual himself, including the sense of concern by community leaders in Tawanganom Village. However, not all informants, there are informants who carry out the prevention of DHF only if there are new directions to move.

In line with Aticeh, Maryanah and Sukamti (2015), which explains that individual motivation that can be active or function when there is external stimulation is called extrinsic motivation. Motivation of some informants who will only move if there is stimulation or encouragement from outside the individual can be called extrinsic motivation. Motivation carried out by health workers includes extension activities. Health workers invite and at the same time encourage the community to be able and willing to carry out DHF prevention activities, so that the incidence of DHF is reduced and there is no more DHF incident.

There is an important potential to be developed to be meaningful for improving the health of yourself and the environment. The health worker can motivate people associated with the prevention of dengue with a group approach in extension activities. Health workers moved to invite and encourage the society in the prevention of dengue fever which came from the outside base on responsibility as health professionals. This is borne out in the opinions expressed by Aticeh, Maryanah and Sukamti (2015) that motivation comes from outside the individual called extrinsic motivation.

Activities to motivate citizens by health workers and society leaders in the Tawanganom village with solicitation, appeal, and the provision of information related to the prevention of dengue. The motivation activities, the role of health

workers and community leaders in the form of manpower and expertise. This is by following under proposed by Prasetyowati (2015) that form of participation in mind, energy thought and effort, expertise, goods, and money.

Individual motivation should come from within yourself so that when the self has high motivation will have an impact on the increase in the incidence of dengue prevention activities to the public. A High impulse that comes from within the individual will lead a person to act more than others, giving its spirit so that someone who is affected/encouraged in doing countermeasures incidence of dengue will be more motivated to countermeasures.

Coordination in DHF Prevention

Coordination activities in DHF prevention in Tawanganom village were carried out across sectors, from the health, security sector, village/sub-district government officials, local governments, and society leaders. Coordination activities were administered to overcome the dengue fever incidence in the village environment, the implementation of coordination is carried out by society leaders along with the Tawanganom government apparatus, *Puskesmas* Candirejo, and Magetan District Health Office. This coordination is often carried out during the reporting of dengue cases in the Tawanganom village. In addition, usually health workers as human resources in holding cross-sector meetings, provide information related to DHF prevention.

"Across sectors in here are really good, the Districts, and Koramil too. Forkompinca (Polsek, Koramil, KUA, Dindik, kb, village) was nice, Sir. (Like Babinsa)." (Informant 1, the health worker, 49 years old)

"Yes, actually we often yes gathering of cross-sector, especially across religious, huh community leaders. Often we have put together, usually right when the village religious leaders were certainly heard. It truly often ... In addition to religious leaders, we (DHO) also exist with education (schools), Village, itself mas health centers for the

prevention of dengue." (Informant 3, healthcare workers, 54 years)

*"If there are positive dengue, we received a report on the lab results right photo, we now report to bu *** (village midwife), continued later reported to the clinic. Later Puskesmas will follow. Coordination is done only by health centers and health departments, we are from villages generally assisted by a pack of RT and RW officials of the block." (The informant 6, leaders of the community, 35 years)*

Health agencies (Health Office or *Dinas Kesehatan* and *Puskesmas*) often carry out coordination activities in the prevention of dengue fever by holding meetings with related agencies. This has the aim of building cross-sector communication in order to carry out prevention activities, the results of the meeting will be an appeal to the community through society leaders. Therefore, there is good coordination between the society, society leaders, health workers and related agencies to carry out DHF prevention. If a DHF case is found, coordination is established between the society and society leaders, which will then be followed up by the relevant agencies to take action related to DHF cases.

The reporting process for case findings is carried out from the society to the *Puskesmas* and the Health Office. If there is an incident in the society that proves positive for DHF, a society figure will be recorded who will then report it to health workers or to village/residence officials. After that the health worker or village/residence apparatus will provide a report to the *Puskesmas*. Furthermore, the *Puskesmas* will conduct an Epidemiological Investigation (EI) to confirm cases as well as carry out surveys before follow-up is carried out. From the EI results it will be known whether fogging is necessary or not. If the spread of cases is found, fogging will be carried out which will then be followed up by the Health Office. If there is no spread of cases, then counseling and Mosquito Nest Eradication or *Pemberantasan Sarang Nyamuk* (PSN) movements are carried out simultaneously.

Coordination is carried out by the health, security sector, village/residence government officials, local governments, and community leaders. This activity took the form of a meeting to discuss the prevention of DHF. Furthermore, the results of the meeting will be conveyed to the people through society leaders. When there is a DHF case, coordination is carried out quickly and swiftly from society leaders to health workers and then forwarded to the *Puskesmas* Candirejo and the Magetan District Health Office for follow-up on the DHF case. This is in line with the objectives of coordination by Siyam and Cahyati (2019) namely: realizing Coordination, Integration, Synchronization, and Simplification (CISS) so that goals are achieved effectively and efficiently. In addition, it can solve the conflicts of interest of various related parties.

The process of reporting dengue cases is carried out massively and with direction. Starting from the society to *Puskesmas* Candirejo and the Health Office. Starting from the society affected by DHF, then society leaders (health cadres) will report to the village or residential midwife and apparatus. Furthermore, *Puskesmas* Candirejo will follow up to conduct EI (Epidemiological Investigation). From the EI results, it will be known what follow-up should be done, fogging or not. Fogging will be carried out by the Magetan District Health Office. This coordination activity is in accordance with the objectives of coordination by Siyam and Cahyati (2019) which states that coordination can be demonstrated by making regular efforts to provide the right amount and time and direct implementation to produce a united and harmonious action on predetermined targets. Where the action is a result of IE with the target society. The existence of good coordination activities is expected to reduce the incidence of dengue fever in Tawanganom village .

Implementation of DHF prevention policy

The incidence of dengue control programs by Kasie P2 Magetan District Health Office are as follows; Counseling, Fogging, PSN, 3M Plus, Formation 1 house 1 *Jumantik* (larva monitoring family), Division of larvicides (abate), Promotion with radio, installation of billboards for 30 points in the district, on the prevention of

dengue, 1 hour in 1 week to eradicate dengue (with voluntary work movement of people).

The activity is an effort in DHF incidence in the region prevention (Magetan). In line with this, Tawanganom village has undertaken many activities to carry out DHF prevention programs by *Puskesmas* Magetan. Incidence of dengue prevention activities carried out in the Tawanganom village including PSN, volunteering, the establishment of a house one *Jumantik*, abate distribution, and fogging

The fifth of these activities has been implemented in Tawanganom as efforts in DHF prevention. However, in reality, people still rely on fogging, whereas it is not effective for the prevention of dengue fever because it only kills adult mosquitoes and does not kill the larvae (*uget-uget*) located in the neighborhood. Furthermore, it also harms health, because fogging uses chemicals that can damage the respiratory system in humans. Reporting from in-depth interviews following results:

"...PSN movement executed simultaneously, voluntary work synchronously and simultaneously PSN also aided by the Army, of Babinsa help. Then there are activities, the establishment of village cadres in the village Jumantik. Wamantik in schools, but not all schools to implement." (Informant 1, the health worker, 49 years)

"Which is not done in other districts, namely, the establishment of one house one Jumantika. That is if you look at the other districts ga ... What is clear is that the countermeasures that no fogging, but fogging were merely limiting the transmission. The society wants the case asked him directly if there is fog. Besides there is a mass larvasidasi mas, if Tawanganom must understand mas, including the PSN, there will also usually mas voluntary work. Yes, it depends on the rural/ urban village mas for the implementation of the work of the office." (Informant 3, healthcare workers, 54 years)

Concurrently, efforts in the prevention of dengue fever are also intensively conducted by health workers through outreach activities. It has a purpose that people want to implement prevention activities incidence of dengue in the neighborhood. Outreach activities conducted by the health worker routine, when Posyandu, Posbindu, as well as associations RW in the village. Implementation of counseling conducted twice a year.

"...What is clear so unremitting we do outreach in the community about how to prevent and prevention DBD itself..." (Informant 3, healthcare workers, 54 years)

"Before the rainy season is from the P2 and Promkes was doing a talk show on the radio, and then replace the whole Baliho (media promotion) in Magetan with countermeasures incidence of dengue, then we instruct to my friends in the clinic to do counseling, monitoring, or directly carrying out voluntary work." (Informant 4, health workers, 52 years)

"We're there, if during this yes. Extension is already, in the community and cadres and prominent citizens" (Informant 1, the health worker, 49 years)

Incidence of dengue prevention program implemented in Tawanganom is PSN, the formation of one house one Jumantik, voluntary work, abate distribution, and fogging. PSN is the Mosquito eradication nest, activity by examining mosquito larvae in the tub, water reservoirs, as well as a pool of water in the home environment. Furthermore, the establishment of a home of the Jumantik has the same activity with the PSN, but these activities are controlled by the larva monitoring in one house there is one larva monitoring. This is by following under the method that causes dengue vector control by Indonesian Ministry of Health on points Mosquito Nest Eradication/PSN-DBD, Dengue vector prevention most efficient and effective way is to break the chain of transmission through mosquito eradication . Its implementation in the society is done

through the efforts of PSN-DBD in the form of activity 3M Plus. Drain the tub, toilet shut the household water tanks (jars, drums, etc.), bury or destroy secondhand goods (cans, tires, etc.). The depletion of water reservoirs needs to be done regularly at least once a week so that mosquitoes cannot breed in that place. The community must doing Plus 3M's activities conducted simultaneously, continuous, and sustainable by not only Jumantik, but also whole community.

People's voluntary work is done by cleaning and re-arrange the environment so that there is no place for mosquito breeding. This is by following under the method causes dengue vector control by Indonesian Ministry of Health on environmental management points, which says that a physical environment such as the type of settlement, water supply infrastructure, vegetation and season affects the habitat of dengue vector breeding and growth. *Aedes aegypti* mosquito as the settlement has the main habitat in artificial containers are located in residential areas. Environmental management is the management of the environment that is not conducive habitat for breeding or known as source reduction as efforts 3M plus (drain, close, and take advantage of used goods, plus: spraying, keep the fish predators, sowing larvicides, etc.) and inhibit the growth of vector (maintaining the cleanliness of the home environment) (Indonesian Ministry of Health, 2017).

The distribution of abate and fogging is an activity to overcome dengue fever using chemical methods. The Ministry of Health explained that the chemical method of handling dengue fever is carried out using insecticides. This method is one of the control methods that are more popular in the community than other control methods. The target for this insecticide is at adult and pre-adult stage vectors because insecticides are poisonous, so their use must first consider the impact that will be on the environment and organisms. The determination of the type of insecticide, dosage, and method of application is an important requirement to understand in vector control policies. Repeated application of insecticides in ecosystem units will cause resistance to target insects. Chemical insecticides for DHF control are; Target adult mosquitoes:

Organophosphate (Malation, methyl pirimiphos), Pyrethroid (Cypermethrine, lambda-cyhalothrin, cyfluthrin, applied by means of fogging and cold mist or Ultra-low Volume (ULV). Target pre-adult mosquitoes (larvae): Organophosphate (Temephos) (Indonesian Ministry of Health, 2017).

Healthy Behavior in DHF Prevention

Healthy behavior carried out by health workers and community leaders is an implementation of the DHF program in Magetan in general, especially in Tawanganom village. These behaviors include 3M, draining the bath, giving abate powder obtained from the health center, maintaining the cleanliness of the home environment, and participating in routine society service activities with residents in their environment.

"If my attitude ya mas, related to dengue. I do not want to carp, family, I am personally affected by dengue. Can it also lead to death if ya mas dengue. Which I warned that create a home that always maintains the cleanliness, check puddle missed like a bird drinking water, which is what it's gallon container mas, where it lo, dispensers, dispenser yes sir. Also continues to drain the tub larva let me not exist." (Informant 1, the health worker, 49 years old)

"Yes, if I still sir, usually always cleaning my home environment, yes because then I would also mothers ya mas sure that clean so yes already common. Continues besides, I gave abate in my bathtub mas that I can from the clinic." (Informant 2, health worker, 32 years old)

"With the dengue much in the neighborhood, I was so wary carp. Yes checking larvae in the shower /toilet, in puddle water like in the dispenser, the back of the refrigerator, keep ya when fitting the rainy season there is a puddle so yes I throw it near my house if ya mas. 3M was mas I did. Can I also always recommend to people to keep the home environment, my future did not implement sir? (Chuckle) laugh." (The

informant 6, society leader, 35 years old)

"If I was ya mas, certainly I was checking in my bathtub, puddles like bird feed, dispenser, sometimes also in a vase, burying garbage, shut water reservoirs, yes 3M mas, continued also I always join voluntary work in the neighborhood sir." (Informants 7, society leader, 32 years old)

There were several informants whom already been affected by dengue, both informant and their family. They are more concerned about healthy behaviors so that they will not be affected by DHF again. The concern is to check up when the heat for three days or more. Treatment of the DHF can be overcome and avoid delays.

"For the DBD itself, I was already 12 times lo mas DHF, during my life. Yes don't know sir, from there I like already know just the signs of dengue-like. So yes I have to do so is not exposed again, if you've got a few days so yes most guns three days I've immediately see, whether I also applied to children or relatives of my wife. Because yes I've memorized it mas. Hahahaha (laugh)." (Informant 5, society leader, 36 years old)

"Because of my children who already had experienced DHF ya mas, my misgivings again mas. If we've heat for more than 3 days so I checked into the lab, the hospital let me know whether it was dengue or not. Additionally yes I often bring to citizens, if there are children or relatives to heat more than 3 days I suggest to immediately be brought to the clinic, to check the lab." (Informant 8, society leader, 44 years old)

Healthy behaviors performed by health workers and community leaders in Tawanganom village aimed to control DHF incidence. Most informants have done a healthy behavior by preventing dengue such as 3M Plus and giving abate. A small part has realized the importance of early awareness against DHD because of personal experience, so they could take

early treatment if exposed to dengue. They could also be immediately detected and handled by the health workers. They hoped to survive and recovered from DHF.

The healthy behavior of health workers and society leaders in Tawanganom village is their awareness of the dangers of DHF due to personal experience of both themselves and family members, so they are more alert if symptoms that lead to DHF occur. In addition, healthy behavior is demonstrated by dengue prevention activities such as 3M Plus, providing abate powder in the bathroom, and maintaining the cleanliness of the home environment. The efforts that have been made, will not be infected by dengue and reduce cases of dengue incidence in Tawanganom village. This is in line with Notoatmodjo (2012) which defines healthy behavior as behavior related to efforts to prevent or avoid disease and prevent or avoid the causes of disease or health problems (preventive), as well as behavior in seeking, maintaining and improving health (promotive).

CONCLUSION

The role of health worker and community leader has been supported to prevent HDF. They have strong motivation and good awareness. The motivation carried out by health workers and community leaders in handling DHF in Tawanganom village came from within the individual and from outside. The coordination of stakeholder has been carried out across sectors, starting from the health, security sector, village/residential government officials, local governments, and society leaders. They have regular meeting to discuss the prevention of DHF in Tawanganom village. The implementation of policies in DHF prevention in Tawanganom village has been implemented such as PSN activities, the establishment of one house for one jumantik, voluntary service work, and distribution of abate, and fogging.

REFERENCE

Afriani, N., Widayati, D. and Setyorini, D. (2016) 'Pengembangan Model Motivasi Jumanior (Juru Pemantau Jentik Junior) Dalam Perilaku PSN (Pemberantasan Sarang Nyamuk)

Aedes Aegypti Berbasis Integrasi Model Lawrence Green dan Mc Clelland', *Jurnal Ilmiah Kesehatan*, 9(2), pp. 129-138.

Aticah, Maryamah and Sukamti, S. (2015) 'Pengetahuan Kader Meningkatkan Motivasi Dalam Melakukan Deteksi Dini Tumbuh Kembang Balita', *Jurnal Ilmu dan Teknologi Kesehatan*, 2(2), pp. 71-76.

Chasanah, S. U. (2015) 'PERAN PETUGAS KESEHATAN MASYARAKAT DALAM UPAYA PENURUNAN ANGKA KEMATIAN IBU PASCA MDGs 2015', *Jurnal Kesehatan Masyarakat Andalas*, pp. 73-79.

Dinas Kesehatan Kabupaten Magetan (2018) *Profil Kesehatan Kabupaten Magetan Tahun 2017*.

Kementerian Kesehatan RI (2018) *Profil Kesehatan Indonesia Tahun 2017*, Kementerian Kesehatan RI. doi: 10.1002/qj.

Kementerian Kesehatan RI (2019) *Kesiapsiagaan Menghadapi Peningkatan Kejadian Demam Berdarah Dengue Tahun 2019*.

Kementerian Kesehatan RI (2017) *Pedoman Pencegahan Dan Penendalian Demam Berdarah Dengue di Indonesia*.

Monintja, T. C. N. (2015) 'Hubungan Antara Karakteristik Individu, Pengetahuan Dan Sikap Dengan Tindakan PSN DBD Masyarakat Kelurahan Malalayang I Kecamatan Malalayang Kota Manado', *JIKMU*, 5, pp. 503-519.

Notoatmodjo, S. (2012) *Promosi Kesehatan Dan Perilaku Kesehatan*. Jakarta: Rineka Cipta.

Pitriani, R. (2015) 'Hubungan Pendidikan, Pengetahuan dan Peran Tenaga Kesehatan dengan Penggunaan Kontrasepsi Intra Uterine Device (IUD) di Wilayah Kerja Puskesmas Rawat Inap Muara Fajar Pekanbaru Relationship Between Education, Knowledge and the Role of Health Worker an', *Jurnal Kesehatan Komunitas*, 3(118), pp. 25-28.

Prasetyowati, H. et al. (2015) 'Motivation and Public Participation to Control Population of Aedes Spp. in Sukabumi City', *Jurnal Ekologi Kesehatan*, 14(2), pp. 106-115.

Provinsi Jawa Timur (2018) *Profil Kesehatan Provinsi Jawa Timur*.

Purwaningrum, S., Widyanto, A. and

- Widiyanto, T. (2016) 'Faktor-faktor Lingkungan Yang Berhubungan Dengan Kejadian Demam Berdarah Dengue (DBD) di Wilayah Puskesmas Banjarnegara 1 Kabupaten Banjarnegara Tahun 2016', *e-journal Poltekkes Semarang*, pp. 104-109.
- Ramdhani, A. and Ramdhani, M. A. (2017) 'Konsep Umum Pelaksanaan Kebijakan Publik', *Jurnal Publik*, 01, pp. 1-12.
- Siyam, N. and Cahyati, W. H. (2019) 'Desa Siaga Demam Berdarah Dengue (DBD)', *Jurnal Puruhita*, 1(1), pp. 91-97.
- Tairas, S. and Posangi, G. D. K. J. (2015) 'Analisis Pelaksanaan Pengendalian Kabupaten Minahasa Utara', *JIKMU*, 5(1), pp. 21-29.
- Utami, A. A. T., Nugraha, P. and Husodo, B. T. (2018) 'Kisah Sukses Tim Pemantau Jentik Rutin RT Dalam Meningkatkan ABJ Di Kelurahan Kramas', *Jurnal Kesehatan Masyarakat*, 6, pp. 704-712.
- Widiyaning, M. R., Syamsulhuda, B. M. and Widjanarko, B. (2018) 'FAKTOR-FAKTOR YANG BERHUBUNGAN DENGAN PRAKTIK PENCEGAHAN DEMAM BERDARAH DENGUE (DBD) OLEH IBU RUMAH TANGGA DI KELURAHAN DOPLANG, PURWOREJO', *Jurnal Kesehatan Masyarakat*, 6, pp. 761-769.
- Yusuf, A. E. (2014) 'Dampak motivasi terhadap peningkatan kinerja individu', *HUMANIORA*, 5(45), pp. 494-500.