

Students' Movement as “*Detik*” Cadre to Improve “*PHBS*” and Making School of Mosquito Larvae Free

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Abstract: MI Nyatnyono 02 West Ungaran District of Semarang Regency is used as a model to create a school of mosquito larvae free. The method of these activities used participatory action research. The *Detik* program is the realization of *Jumantik*, foster and train students to monitor larvae around school and their own home by filling up the form. The activities involved 50 students of fourth and fifth graders. They were coached with dengue prevention learning materials. The activities were carried out for five days consisting of training and coaching, the competition to create bulletin boards and environmental movement by planting mosquito repellent plants such as lavender and geranium. The students fulfill the form once a week. The teacher as *Jumantik* in charge then submits the monthly summary report to the *Puskesmas* to complete the periodic inspection of larvae data within 3 months and then follow up.

Abstrak: MI Nyatnyono 02 kecamatan Ungaran Barat, kabupaten Semarang digunakan sebagai model sekolah bebas jentik. Metode kegiatan ini adalah penelitian tindakan participatory. Program *Detik* (*Detektif Jentik*) adalah realisasi dari *Jumantik* (*Juru Pemantau Jentik*) yang membina dan melatih siswa untuk memonitor jentik di lingkungan sekolah dan rumah mereka dengan mengisi blangko. Kegiatan ini melibatkan 50 siswa kelas 4 dan 5. Mereka dibekali materi pembelajaran pencegahan demam berdarah dengue dan pemberantasan sarang nyamuk. Kegiatan ini berlangsung selama 5 hari yang terdiri dari pelatihan, pembekalan, lomba majalah dinding dan gerakan cinta lingkungan dengan menanam tanaman pengusir nyamuk seperti lavender dan geranium. Siswa mengisi blangko seminggu sekali dan menyerahkan kepada guru sebagai penanggung jawab *jumantik* di sekolah. Selanjutnya diserahkan ke *Puskesmas* melengkapi data pemeriksaan jentik berkala setiap 3 bulan sekali dan kemudian ditindak lanjuti.

Kata Kunci: ‘*Detik*’ Cadre, Mosquito, Students’ Movement.

BACKGROUND

Clean and Healthy Behavior (PHBS= Perilaku Hidup Bersih dan Sehat) is all done on the health behavior of the awareness that a family member or family can help themselves in the field of health and play an active role in the community activities. Based on the health profile of Semarang regency in 2014, stated that the district of West Ungaran still relatively high incidence of cases of dengue hemorrhagic fever, which is 5.44 per hundred thousand inhabitants. Most sufferers are children. Dengue Hemorrhagic Fever (DHF) has been known in Indonesia as the endemic disease, mainly for children. Whereas in fact, Nyatnyono proclaimed as a religious tourist village by the Government of Semarang regency. Therefore the writer along with stakeholders made Nyatnyono as one of the dengue disease-free villages. One way to mobilize people love the environment cleanliness, can be started early among children. It is because the dengue mosquito is active at 07:00 to 10:00, and the children do in school activities at that time. So that the school environment clean, healthy and free of larvae should be realized by the whole school community in order to avoid dengue. The program is named 'Detik' or Detektif Jentik. The form of the week once handed to the teacher in charge jumentik in school.

According to Brotowidjoyo (1994), in Indonesia, dengue outbreaks arose for the first time in Surabaya in 1968. Dengue has been reported from 26 provinces and spread from urban areas to rural areas. During 1974 to 1982 was reported as 3500-7800 cases with Case Fatality Rate 3.9%. The cause of the disease is dengue virus and transmitted through the bite of the aedes aegypti mosquito as the main factor, in addition to the mosquito aedes albopictus.

Outbreaks of dengue fever is often enforced various regions in Indonesia in the last few years require attention. Similarly, the aedes aegypti vector that contained both rural and urban areas given the risk of disease outbreaks in the future. To overcome the problem of dengue fever in Indonesia has for decades made various efforts to combat the vector, but the results are not optimal. Extraordinary events still occur. Theoretically, there are four ways to cut the transmission of dengue namely to eliminate the virus, isolation of patients, to prevent mosquito bites and extracting vectors. In fact, vector control is done in two ways: by means of chemical and environmental management, one of them by way of mosquito nest eradication .

Clean and Healthy Behavior are supposed to be implanted since an early age. Not only in the family as the first environment where children grow and develop, but in elementary school, the children should be taught it. Because

teachers and schools have a major role in shaping the character of hygienic early. Besides, good health can support the learning process better.

Aedes Aegypti mosquito is active at 7:00 to 10:00 a.m, when the children are learning in school. So clean, comfortable school environment is a must that the children do not get sick as a result of these mosquitoes. The weather is hot and humid tend to be conditions suitable for breeding mosquitoes.

PHBS IN SCHOOL

Introducing the world of health to children in schools, should not be too difficult because in general each school already has a School Health Unit (UKS). Understanding UKS is the effort to foster and develop healthy lifestyle habits and behavior in school-age learners who carried out a comprehensive and integrated. In Act No. 36 of 2009 Article 79 on Health, confirmed that the "Healthy Schools" was organized to enhance the ability of healthy life learners in a healthy living environment so that students can learn, grow and develop in harmony and as high as they are expected to serve as a resource quality human. UKS aims at improving the quality of education and learning achievement of learners by the behavior of clean and healthy living as well as students' health. It also creates a healthy environment, so to enable the growth and development of harmonious and optimized in order to establish complete Indonesian.

The scope and purpose UKS do not lead to the practice of clean and healthy living behaviors (PHBS) in school. Because it consists of a set of behaviors practiced by students, teachers and the public school environment on the basis of consciousness as a learning result. So that independently be able to prevent disease, improve health, and play an active role in creating a healthy environment. Hendra Widodo (2013) states wiping students' hands with running water and soap, eating healthy snacks in the school cafeteria, Latrines clean and healthy, regular exercise and measurable, eradicate mosquito larvae, no smoking in school, weigh and measure the height of each month, and throw garbage in its place.

PHBS is all done on the awareness of health behavior that family members can help themselves in the field of health and play an active role in health-related activities in the community. PHBS is numerous, could be hundreds. For example on nutrition: eat diverse food, drink, tablet add blood, consume iodized salt, to give babies and toddlers capsules vitamin A. The environmental health such as taking out the trash in its place, clean up the environment, each household is recommended to carry out all the health behaviors.

PHBS has some benefits are as follow: each member of the family to be healthy and not get sick. Children grow up healthy and smart. PHBS makes hard-working family members. Household expenses can be addressed to meet the family nutrition, education and venture capital to supplement the family income.

Dengue hemorrhagic fever (DHF) is an acute infectious disease caused by the dengue virus and is spread by mosquitoes *Aedes aegypti*. Dengue Hemorrhagic Fever DHF caused by Dengue virus with the type DEN 1, DEN 2, DEN 3 and DEN 4. The virus is included in group B Arthropod borne viruses (Arboviruses). Viruses that are emerging in the community namely dengue virus types one and three. Symptoms of dengue fever begin with sudden high fever 2-7 days around 38 C-40 C and also some manifestations of bleeding.

Dengue Hemorrhagic Fever (DHF) has been known in Indonesia as the disease is endemic, especially for children. In Indonesia, dengue outbreaks arise as for the first time in Surabaya in 1968. To date dengue were reported from 26 provinces and has spread from urban areas to rural areas and during 1974 to 1982 was reported as the case 3500-7800 Cases *Fatality Rate* 3.9%. The cause of the disease and dengue virus is transmitted through mosquito bites. *Aedes aegypti* as the main factor, in addition to mosquitoes *Aedes albopictus*. Outbreaks of dengue fever is common in many parts of Indonesia in the last few years that require attention.

Similarly, vector *Aedes aegyptic* obtained both in rural and urban areas given the risk of disease outbreaks in the future. To overcome the problem of dengue fever in Indonesia has for decades made various efforts to combat the vector, but the results are not optimal. Extraordinary events (KLB) still occur theoretically there are four ways to cut the transmission of dengue is to eliminate the virus, isolation of patients, to prevent mosquito bites (vector) and extracting vectors. For vector control is done in two ways: by means of chemical and environmental management, one of them by way of mosquito nest eradication (PSN).

PSN is an action to break the chain of mosquito development. PSN action consists of several activities including: 3 M (draining, closing, burying). 3 M is regularly the actions taken to combat the larvae and avoid Dengue mosquito bites by draining water catchment sites such as bathtub, jars, buckets, flower vases, birdbath and others once a week. Closing tightly all water reservoirs such as a bucket, barrel, drum, and others. Burying all second hand goods that are around the house to collect rain water.

According to Fida et.al (2012), dengue kills mosquito larvae in the water is hard or difficult drained of water by sprinkling powdered temephos (abate) or altosoid 2-3 months with a dose of 1 gram abate to 10 liters of water, or 2.5 grams of altosoid to 100 liters of water. Abate can be obtained / purchased at the health center or at the pharmacy. To repel mosquitoes with mosquito repellent. For preventing mosquito bites using repellents, replacing the wire netting at the windows and vents not familiarize hanging clothes in the room, also using gloves netting bedtime.

While Nursisto (1999: 1) states that the usual magazine wall or into a wall magazine is one of the communication media as bulletin board. Magazine called wall because in the presentation usually display on a wall or the like. Presentation of the wall magazine usually pieces of writing, images, or a combination of both. With the basic principles form the columns, various works can be arranged in varied. All materials are created in harmony so that the overall appearance of wall magazine looked interesting. It is generally tangible physical form sheets of plywood, cardboard, or other materials with diverse sizes. It is relatively large size around 120 cm x 240 cm, while smaller is adapted the condition. In fact, wall magazine has many benefits.

Wall magazine is included communication media. It is installed in public places, such as village halls, schools, places of worship, and other public place. For enhancing students' creativity is one of the important things that must be considered by educators. In general, students have creativity in a variety of activities, such as sports, arts, crafts, games, and activities of daily expressions. Therefore, education should provide the means to channel talent and students' creativity to be more developed. One means for it is the publication of the mass media, such as a school magazine or bulletin board.

Reading habit will support students in their imagination because their knowledge is increased. To that end, relish reading must be instilled. In this case wall magazine has a considerable role. It can be issued by anyone within a period of relative freedom depends readers. If the reader wants, it can be displayed every day with written material that is actually appropriate environment around the readers. In school, students can fill their spare time to read wall magazine and then practice writing. If the result of the students' shown in wall magazine, it will certainly be beneficial to the development and growth of the students' competence. In addition, it is also beneficial for the other reader.

It is entirely possible that wall magazine can not meet the tastes of readers. This will make the wall magazine as an incentive for readers to look for other reading material more complete. The habit of reading will increase one's

knowledge in various fields. Indirectly it will be the driver of increasing intelligence. It becomes bridging the birth of knowledge, agility of thought and intelligence establishment.

Wall magazine is the result of team work or group work that leads all parties in it to organize. For that we need each other comply with the agreement, the rules that have been established, self-discipline, and sincerity to work. By setting up a wall magazine, automatically anyone would understand the organization and directly related to the activity in it.

In publishing wall magazine, organizers have set up a mature plannings and there should be cooperation in management. Samayang working well between the various parties involved are expected to produce grain quality Mading. Thus, directly or indirectly, wall magazine puts compactness basic as capital work in every growing organization. Wall magazine is as a medium to improve writing skills. Through wall magazine, every student has the same opportunity to train themselves in the writing. Habits and writing skills do not happen instantly or automatically, but rather occurs through a process of learning and practice. Students who have habits and writing skills, tend to have insight and critical thinking.

THE ACTIVITIES, RESULT, AND STRATEGIES USED

MI Nyatnyono West Ungaran Semarang District 02 was selected for this pilot schools to create schools larvae free. This activity is based on the district health profile 2014 of Semarang Regency, had the highest of dengue fever. In addition, Nyatnyono village has the highest incidence rate around 169 in the region, and 78 with the largest age group of school age.

Mosquitos are active at 07:00 to 10:00, at the time of the children stay to learn at school activities. So the school environment clean and healthy and free of larvae should be realized by the whole school community in order to avoid dengue. To achieve this, the strategies are: First, Students' Coaching and Empowerment. The program is named Detective Flick. It means that the students were trained and coached to become agents of larva monitoring (Jumantik=Juru Pemantau Jentik) in school. 24 students were the representative of the class 4 and 5 who attended training and coaching in this program. The students are equipped with dengue prevention material and PSN (mosquito nest elimination) in schools and Behavior Clean and Healthy Lifestyle (PHBS) in schools.

Scnd, Wall Magazine Competition. The purpose of this activity is to make students have some knowledge and awareness on PHBS and mosquito nest elimination. It was followed by the fifth graders of MI Nyatnyono 02 West Ungaran.

Third, Go Green School. Students were selected for training as a cadre school larvae free and go green program by planting mosquito repellent plants. There are ten plants that can prevent mosquitoes from coming or repel mosquitoes namely: Geranium Flower, Lavender, Rosemary Flowers, Citrosa Mosquito, Mintrosa of Lady Diana, Marigold, Kecombrang, Zodia, Serai Wangi, Wangi Root. So by planting them, it is one of the effective way to repel mosquitoes. They are also powerful weapons mosquito repellent. Besides safe for health, good for the environment and beautiful to decorate the school environment. For information, fogging ineffective precisely eradicate mosquito breeding because it actually makes the mosquito immune.

Fourth, Larvae Free Cadre. Students who previously have been nurtured and trained to monitor the larvae around the school. Students are also taught to fill up the monitoring of larva. The form of the week once handed to the teacher in charge jumatik in school. The next person in charge of handing in the monthly summary report to the health clinic to complete the data Flick Periodic Inspection (CHD) within 3 months and then follow up. Monitoring is expected to be implemented simultaneously larvae and other schools in school routine to realize the free school districts larva in Semarang regency.

CONCLUSION

Based on the service community activities were conducted in this program, it can be concluded as follows: First, the implementation of students' movement improving PHBS (Behavior Clean and Healthy) in MI Nyatnyono 02 is preceded by counseling and following up with ongoing guidance regarding healthy living, and wash hands properly. They also were also provided some knowledge on larvae and dengue fever. This program was followed by wall magazine competition. Scnd, The efforts for becoming a school of larvae free in this program namely first, to train and coach students as flick detective cadres. They will be a model of learners in maintaining school cleanliness. They examine larva monitoring both within the school and in the home environment. Second, the students are encourage also love green environment by planting repellent plants.

RECOMMENDATION

Based on the program above, it is recommended all schools implement the health school environment in order to have good behavior and cleanliness in daily life. These habits will make comfortable school environment. Therefore the students and anyone at school will feel nice and enjoy learning. It consequently prevents them from mosquito bites.

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