

WE NEED A BIGGER BOMB: A COMMUNITY ATTEMPT ON FIGHTING DENGUE FEVER IN A SUBURBAN SURABAYA, INDONESIA

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INTRODUCTION

Dengue had become a major public health problem in Southeast Asia, which seem to be seriously growing in the future. Outbreaks were happened in 2013, several evidences suggest that it were widely unrecognized, much has been unreported and the amount of budget often not enough for running the eradication program.¹

Surabaya and Jakarta were two areas first reported outbreak of dengue fever in 1968. The following year this disease became epidemic which appears annually with the outbreak pattern occurred every five or ten years.²

Based on East Java Province Health Department, in the beginning of 2015 have been reported 1,817 cases of dengue fever. This case increased by 85.4% from the previous year in the same month, i.e. January 2014, which only reached 973 cases.³

The concept of social capital widely addressed directly relates to the role and function of community health in providing health promotion which stressed the significance of participation, community capacity building, achieving the community health promotion by collective action and empowerment.⁴ Putnam and other scholar explain that participation was very important in a variety of networks and see that social capital can help their collective action to achieve the goal of good health through the paths of individual social capital and social capital as a collective attribute.^{5, 6, 7}

According to the initial assessment at Tegalan, there would be three level of dengue prevention and control problem, which are at individual level, neighbourhood and community level, and inter-sectoral level. These three level later on reveal different aspect of dengue management situation. This study tries to describe the existence of community social capital regarding dengue fever prevention and control in Tegalan sub-district, Surabaya.

MATERIALS AND METHODS

Data were collected from Januari – April 2016 in the Tegalan subdistrict (Pseudonym), Surabaya where dengue has especially high prevalence compared to

other sub-district. During 2015 there were 125 cases of dengue. In the first two month of 2016 there 6 cases.

Study Area

A qualitative descriptive study was conducted in one subdistrict with the highest incidence of dengue In Surabaya.⁸ Tegalan was a subdistrict in a suburban geographical area, which was the 4th largest area and has the highest population density and part of the southern Surabaya. The overall site areawas 7.64 Km² occupied by 230,563 inhabitants and divided into six villages.

One of the village in Tegalan previously was a biggest prostitution center which shutdown by the government in late 2014. This condition lead some of the community to loss their jobs and in some degree ruining economic life.

Data Collection

The participants of this study consist of; 6 person from Village staff, 1 person from Subdistrict Office, 4 person of health care provider in Local Community Health Center, 2 person of Health Volunteer. Thus, 13 key informants were the participants from the existing population in the area of research coverage. The in-depth interviews questions had revolved around the social condition of its social capital of the community on Dengue Fever (DF) prevention and control from related experiences. A focus has been placed on the existence, role, experience, and connection to the community with the activities on DF prevention and control.

Ethical clearance to conduct this study was granted By Institutional Review Board Ethical Committee Khon Kaen University (Thailand), Regional Department of Health (Surabaya, Indonesia) and Regional Department of National Unity, Politics and Public Protection (Surabaya, Indonesia). All participants were provided with Participants Information Sheet in Bahasa Indonesia and sign the consent form prior to participate in the study.

RESULTS

Behavioral problem

As endemic areas which each year had to face dengue cases, Tegalan with the entire existing attribute (population density, economic fall, ex-

prostitution area, high risk of crime) make it to had complex health problems, especially with dengue fever. Attitudes and behavior of the community who were somehow still having low concern on health indicate one of the reasons why it was very difficult to combat against dengue in the region. The habit of littering, the difficulty in soliciting residents to clean the bathroom and less ownership of healthy toilet rate were exact examples of how inappropriate attitudes and behavior of clean and healthy life style. As been told by participant from Subdistrict Office 'Because they were used to living like that. To change the life style was difficult. To clean a bathroom once a week was exhausting. Especially if the bathroom rather large it will be more lazy. The community itself were rather difficult to be urged to change. P1

Social group mobilisation

One of the social capital form, which plays an important role in the efforts to eradicate dengue, was Sanitarian. In the Tegalan Subdistrict there were 4 Sanitarian in four Community Health Centers. Those Sanitarian were responsible for the entire program of prevention and control of dengue fever in the region of their respective coverage Community Health Center. They will have cooperate with the village offices, Sub-district office, Department of Health and also with Larve Observer group such as; Bumantik (Women Larvae Observer), Jumantik (Family Member larvae observer), Rumantik (Teacher larvae observer) and Wamantik (Student larvae observer) in each region. Together hand in hand with Community Health Workers (CHWs) here they go down straight to the resident houses to check mosquito and larvae periodically every week, doing health education to residents and patients if there was a case, conduct epidemiological investigation on 20 houses around the patient spot, distribute larvicides and fogging with a radius of 100 meters from the cases house.

One of the Sanitarian told 'Better I get down (to the village) for the prevention and education rather than for fogging activities. If there were cases we feel sorry and pity to the family, bothering, the risk of spreading to the neighbours. PSJN (Mosquito and Larvae Breeding Eradication) were more comfortable way. So we mobilize Bumantik (women larvae observer) at the bottom (grassroots) line. 'P 11

Communal voluntary cleaning work

In 2015 there were 125 cases of dengue fever in the Tegalan subdistrict and it were accounted for 20% of the incidence in the whole area of Surabaya. Those conditions encourage various sectors to undertake joint efforts in the prevention and control of dengue fever. One of the main effort was to perform a

community service voluntary work by involving the various elements in the society. The voluntary work among others by cleaning up the environment, doing reforestation, cleaning drains and wells, doing the painting, and cleaning trash.

A participant from Village Office told 'Public Voluntary work were done at least once a month. Communal environmental voluntary work was also accompanied (integrated) with doing PSJN (Mosquito and Larvae Breeding Eradication). Bumantik (Women Larvae Observer) and lay citizens also monitoring the larvae. 'P 3

Leader support

The role of the leader in establishing and maintaining cooperation across sectors was very influential, especially to set an example for the entire community. People will often look for role models in their leaders. Additionally leader with their possessed authority and power also expected to be able to facilitate the cooperation, which will give an effect on the contentment of doing cross-sectoral collaboration activities.

As told by one of the Sanitarian '... Before there were Tri Rismaharini (Recent Mayor of Surabaya) it seemed like we were working on our own. It was precisely because of Risma's the cross-sectors collaboration were driven very well. As village and Sub-district used to not so concerned in fighting dengue. Since there was Risma village leaders then asked to be concern for dengue, because it was not only a health (sector) concern, not only the concern of Department of Health, this was your region, if there were people sick, you have to participate in moving (mobilize) society. 'P 12

A small bomb

Surabaya Government in 2014 made a policy to give honorarium to the Bumantik (women larvae observer) for 25.000 Rupiah or equivalent of USD 2 per month. This policy shows positive effects by decreasing the incidence of dengue fever significantly than the previous year. Recorded during the five-year decrease in the number of dengue fever occurred beginning in 2014. Successively the following data, in 2010 there were 3.379 cases. Then in 2011, fell further to 1.008 cases. In 2012, dengue cases rose to 1.091 and returned back rose to 2.207 cases in 2013, in 2014 was down to just 816 cases and in 2015 only 600 cases.

'Because they got it (honorarium) then there was changes, dengue cases fall down from previous years. It have been like a small bomb, but we should have more bombs again. This little bomb could eradicate quite a lot mosquito, the effect of this Bumantik (women larvae observer) already exists. but have not been maximum 'P 10

DISCUSSION

Tegalan was a community that trying to crawl up and move from difficulties to the state of improvement and development. Economic fall, poverty, economic inequality, incentives for Bumantik, Wamantik and Rumantik program, cross-sector collaboration and the role of the City Mayor could mobilize the public smoothly becoming aware of the health and the dangers of dengue fever was a real picture of the condition Tegalan sub-districts, Surabaya. On the other side, the shut down of prostitution center which affects particular population loss their job and turn to fight more harder for their life and ignore their health situation and.

Subdistricts and other part of Government office with ongoing collaboration to various stakeholders show that maintaining and caring relationships with communities was the key to community development.

Bourdieu argues that "the network of relationships is the product of investment strategies, individual or collective, consciously or unconsciously aimed at establishing or reproducing social relationships that are directly usable in the short or long term".⁹

The components of community based organization participating in every effort shows that the norms of helping each other, cooperation, solidarity and mutual trust were still exist in the community. All of these resources were the wheels, oil and glue that will continually be used for the benefit and good state of the community, especially in the prevention and control of DHF and other collective problems.

Subaris et al., in his recent research in Bantul, Yogyakarta, Indonesia showed that social capital was able to increase the value of Larvae Index in the form of family participation in the activities of voluntary work.¹⁰ Another study done by Mukarromah et al., in Sidoarjo, Indonesia also found that the forms of social capital such as cooperation, trust and norm have an significant impact on community sustainability awareness efforts in dengue fever management.¹¹

Managing all resources, components, forms and a whole series of social capital in the community was not easy. The difficulties arise when responsible social group facing obstacles to urge people to change into healthy lifestyle, dispose of and manage waste properly, soliciting to participate in the eradication of the larvae breeding places and mosquito. Nevertheless, utilising social capital slowly through an initiation and continuous efforts could produced gradually visible results. The role of local leaders who participated with residents provide a multiplier-effect to every component of society. Steadily people were getting used to using the existing social capital in the form of a network, norm and trust for a change.

Field argue that "Trust and trustworthiness have been often compared to a lubricant, oiling the wheels of a variety of social".¹²

Strategies along with some regional leaders across sectors such as health departments, community health centers, military, police to keep moving, walking and working hand in hand with the community was a realization of how social capital can work and have positive influence or impact. As the Bourdieu state "features of social organization, such as trust, norms, and networks, that can improve the efficiency of society by facilitating coordinated actions."¹³

At this stage then I believe that all connection, relationship, activities, programs and plans that were made by the community, from the community and for the community was a picture of community that will likely try to govern themselves in a positive way.

CONCLUSION

Social capital were basically a feature which embedded in the community. Social capital in the form of norms, trust and network demonstrated through a variety of community activities such as community gatherings, establishment of larvae observer group, voluntary work, effort to change behavior and cross-sectors collaboration. Future research should involve a wider social group and wider government agency in initiating social capital as in their community public policy.

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