Community Participatory Activities Relating to Dengue Haemorrhagic Fever Prevention and Control in Bentre Province, Viet Nam*

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Abstract

It is increasingly recognized that social communication and mobilization is an effective component of dengue haemorrhagic fever (DHF) control strategy. This qualitative study conducted in four communes of Ben Tre province was to learn about community participatory measures relating to DHF prevention and control. Based on the plan developed by the commune government, local schools and social unions have implemented many measures to mobilize local households to clear the environment of mosquito breeding. The continuing implementation of these measures over the years has proved that improved knowledge and behaviour of households have significantly contributed to DHF control in the Ben Tre province.

Keywords: Social communication and mobilization, community participatory measure, dengue prevention and control, Viet Nam.

Introduction

The south of Viet Nam, especially the Mekong Delta, has a tropical climate with two distinct seasons – rainy and dry seasons. The population growth, accompanied by unplanned urbanization, absence of piped water supply and poor solid-waste management promote ideal conditions for the three- or four-yearly cyclic outbreaks of dengue haemorrhagic fever (DHF). Efforts to control DHF outbreaks in the Mekong delta have focused on two main approaches: (i) improvement in the case management capacity of health facilities to reduce DHF-induced mortality; and (ii) control of vector mosquitoes to reduce the annual DHF morbidity.

The Ministry of Health has established national guidelines for these two approaches. However, while the DHF-induced mortality has
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reduced significantly due to the standardization of case management facilities for DHF in health care institutions, the control of the vector mosquitoes seems to be far from satisfactory. DHF outbreaks still occur every year in the Mekong Delta and the morbidity remains high.¹ In 2005, a widespread DHF epidemic with 44,141 cases and 47 deaths occurred in 20 provinces in southern Viet Nam.¹ This survey was organized to understand community participatory activities undertaken for DHF control in one of the provinces.

Study area

Ben Tre is a province in the Mekong Delta with a population of 1,363,000 (2005). With an area of 2,315,000 km², including three islands, there are seven districts and each district consists of many communes. The number of communes in each district varies, depending on its population and area. Each commune consists of many hamlets. Each hamlet consists of many self-governing clusters, each of which includes 40–60 neighbouring households. The main water source is surface water from the Cuu Long river. In addition, rainwater is stored in earthenware jars for drinking purposes. Tap-water supply is restricted to district towns. Ben Tre is a land of fruits, especially coconut.

Materials and methods

Four focus-group interviews were conducted during February 2006 in 4 communes: Dinh Trung and Thoi Lai in Binh Dai district, Tan Phu Tay in Mo Cay district and My Thanh in Giong Trom district. Each group consisted of eight to nine interviewees. The average age of interviewees was 43 years (range 22 – 64). There were eight women and 24 men. These people were the leaders of the hamlets, local primary and secondary schools and local social unions such as Women’s Union, Youths’ Union, Farmers’ Union, Fatherland Front and Veterans’ Union. The selection of the interviewees was based on the recommendation of their workplaces and their participation in the study was on voluntary basis. The investigators comprised of a doctor from the Children’s Hospital No. 1 and the other from the Provincial Medical Preventive Centre. The former was responsible for facilitating group discussion, while the other was responsible for documenting the discussion. An audiotape was recorded at the same time.

The discussions covered four main themes: (i) assess the significance of DHF in relation to community health; (ii) necessary measures that community could apply to control DHF; (iii) how to implement these measures in short-term and long-term perspectives; and (iv) what were the community’s expectations for improving DHF control?

All interviewees could make free and frank comments and offer opinions. The young interviewees were invited and encouraged to freely participate in the discussions and put forward their ideas independent of their elderly participants. The facilitator recorded all opinions and suggestions of the interviewees throughout the discussion. No individual dropped out during the process of discussion.

Results

The outcomes in respect of the four objectives are outlined below:

DHF can be easily acquired and proves fatal is the fear of each family

The first impression of people during a DHF outbreak is that it can easily develop into an epidemic. A DHF outbreak presents an overload situation in hospitals when sick
children flood district hospitals and have to stay in the lobbies of DHF departments in provincial hospitals. Thus, a DHF outbreak is considered a high-risk factor in the community, especially for those family members who had suffered its effects during earlier outbreaks. DHF is a threat in many respects: individual sickness and death, family expenses and social-life impact. Some of the opinions that emerged are as follows:

“People are very scared of DHF; hence, very enthusiastic in preventing the disease.” (Male, 60, Hamlet head)

“People are very scared and worried about DHF because it gets easily transmitted and proves deadly.” (Female, 26, Women’s Union)

“When DHF outbreak occurs, every family has a sick child. In 2000, there were many DHF cases in the whole commune and my child was also sick. The hospital didn’t have enough rooms. Sick children had to stay in the lobby.” (Female, 40, Women’s Union)

“DHF is now so common that it affects people a lot.” (Male, 62, Veteran)

The scare is not limited to a locality reporting an outbreak, but when informed by the mass media about DHF in other places, people start worrying about the threat of DHF in their own locality.

“If people remain ignorant, DHF will occur immediately and affect significantly people’s health and life.” (Male, 43, Hamlet head)

“The society is developing. People travelling from place to place can bring disease germs back to the locality.” (Male, 32, Fatherland Front)

The scare of DHF makes people to find ways and means to prevent its outbreak. However, treatment at a health facility when the disease has been acquired is not an easy option.

“People are very knowledgeable. So, when their child has high fever, they will take their child to a health facility right away. However, there is no specific remedy for DHF.” (Male, 58, Hamlet head)

“People understand that there is no specific remedy for it.” (Male, 56, Veteran)

“DHF is easily preventable, but once acquired, one is at risk of death.” (Female, 28, Women’s Union)

For DHF, prevention is the main issue

People realize that when a DHF outbreak occurs, in spite of seeking health care early enough, a sick child is still at risk of death. Therefore, prevention is what the people and the communities desire. The selected prevention measures include “no mosquito’s larvae, no mosquito, no DHF”. To achieve that, communication and social mobilization to enhance people’s knowledge was considered to be the leading measure to prevent DHF in the community.

The Commune People’s Committee (CPC) is the agency responsible for coordinating all activities of the local social organizations in terms of communicating and mobilizing them for DHF prevention. Depending on the number of hamlets in a commune, the CPC assigns each social organization (women, youth, farmer, veteran, Red Cross and Fatherland Front) to be in charge of 1-2 hamlets. At the assigned hamlet(s), the steering committee of the social
union visits all households to communicate and mobilize the use of bednets and the application of measures to eliminate mosquitoes and their larvae. The heads of social unions need to participate in the regular monthly meetings held at the hamlet(s) they are assigned to in order to communicate and remind people to apply DHF preventive measures. Households that have difficulty in applying these measures will be addressed in the meeting so that other people can find ways to support them. Two weeks later, the steering committee will visit these households again to see the results of communication and mobilization activities. Besides, each social union also has its own regular monthly or quarterly meetings for its members. In these meetings, measures to protect individual health, hygiene and environment are important issues to be discussed. Clusters/households, which cannot do well, will be mentioned in the meeting to get support from all union members. The attitude of the interviewees during the discussions showed that they did not feel very uncomfortable to positively criticize other families in the self-governed meetings. The interviewees, whose relatives living in other self-governed groups were criticized during the discussions, also recognized that it was necessary to protect the community as a whole. Some excerpts from the interviews are given below:

“The Committee has a plan for DHF prevention, and assigns commune health staff and the social union to conduct all preventive activities in cooperation with self-governing clusters and health volunteers to implement DHF preventive measures for the people.” (Male, 64, Veteran)

“The farmers’ union will disseminate the plan immediately to the steering committee members as soon as it is received.” (Male, 40, Farmer)

“The Women’s Union has its branches and groups. During its meetings, members will be communicated many integrated contents. There is communication and discussion on how to recognize DHF, how to prevent it, the members are reminded about using bednets and cleaning surroundings of their houses.” (Female, 60, Women’s Union)

**Commune People’s Committee (CPC) and Commune Health Station (CHS)**

The CPC is also the local authority that considers and approves the annual DHF prevention plan of the CHS. Based on this, in its monthly meetings with health volunteers, the CHS advises them on ways to mobilize households for participating in DHF prevention activities. The CHS also provides pamphlets to health volunteers to educate households during their home visits. In the monthly meetings of self-governing clusters, health volunteers also discuss general health issues and they take this opportunity to engage people in a discussion about DHF prevention at home. The activities of health volunteers are not independent, but they work in cooperation with the social unions. Some excerpts of the discussions are given below:

“Every month community health volunteers have a meeting with CHS and deliver pamphlets to households.” (Male, 49, Fatherland Front)

“Communication and counselling are not only at self-governing clusters but also for women, because women are the ones who take care of the health of their children and families. Women’s Unions also receive pamphlets to deliver to their members for their use in the family.” (Female, 40, Women’s Union)
In addition to these regular communication and mobilization activities, every year during the rainy season, there are health campaigns to mobilize mosquito elimination and environment cleaning. CHS is in charge of developing the campaign contents at the beginning of the rainy season. Basic activities in the campaign are posters, mottos, and broadcasting through the commune amplifier system to call on people to implement DHF preventive activities. Primary and secondary schools also participate in the campaign twice a year, once in the beginning of the rainy season and the other in cooperation with the “blue summer campaign” of the Youths’ Union. Some excerpts of these activities are given below:

“Schools consider DHF prevention as a priority in health education for students. They all know about the disease, and can use mosquito killing racquets. Every Saturday morning, they go to clean the environment around the hamlet.” (Male, 42, primary and secondary school)

**Blue summer campaign**

Environment cleaning and DHF prevention activities are highly appreciated in the “blue summer campaign.” This campaign is a social mobilization effort conducted by students during summer. According to a 5-year cooperative plan between the Youths’ Union of Ben Tre province and that of Ho Chi Minh City, in the yearly summer vacation, the Youths’ Union of Ho Chi Minh City takes volunteer students, selected from its universities and colleges, to Ben Tre. In Ben Tre, the students are assigned to local households. During the 6-week period, the volunteer students and local high school students conduct the social communication and mobilization campaign to enhance the awareness of local people on selected themes. There is always one week saved for cleaning the environment and instructing and conducting mosquito elimination methods at household and community levels. The volunteer students go around house-by-house to instruct and support people in covering their water containers in order to prevent mosquito breeding, and clean all trash collected around houses such as coconut shells, old tires, plastic bottles, etc. This is social mobilization coupled with action, which receives people’s support and appreciation. The young interviewees were very proud of listening to other interviewees and highly appreciated the tasks that the summer campaign had done.

Excerpts:

“The blue summer campaign organizes and communicates for the whole communes by pamphlets of CHS and instructing households to clean their houses/surroundings and covering all water jars. A 15-day follow-up visit showed that people had learned a lot and followed the advice very well.” (Male, 27, Youths’ Union)

“People welcomed the campaign, clearly recognized the benefits and were willing to use bednets and do environment cleaning and jar covering.” (Female, 37, Women’s Union)

Other forms of social mobilization are also employed to mobilize households in DHF prevention such as meetings supported by CPC to launch source-reduction campaigns in the community. Schools also gather students to conduct environment-cleaning activities on Saturday mornings. The aim of these activities is to remind people to keep the environment free of mosquito breeding.

**What can be done to make DHF no longer the fear of each family?**

Community communication and mobilization has had a significant impact on DHF
prevention. Everybody recognizes the correctness of the DHF prevention approach.

Excerpts:

“DHF has declined much. Last year, there were only three mild cases of suspected DHF in the commune.” (Male, 57, Red Cross)

“A few years back when an outbreak occurred, every household had 3 to 4 children with DHF. But, at present, the number of DHF cases has reduced significantly due to the enhanced knowledge of the people.” (Female, 52, Hamlet head)

Sustainability of DHF control

The sustainability of these results requires implementation of these activities on a regular basis throughout the year by the community. In order to sustain the effectiveness of social mobilization, local government and social unions must consider this as one of their permanent tasks and introduce some sanctions for that.

Excerpts:

“CPC builds the annual health plan for the commune, which also includes the plan for DHF control. The plan gives detailed assignments for each social union about what needs to be done.” (Male, 48, Hamlet head)

“If my house is found untidy or there are mosquitoes breeding, I will be reminded.” (Female, 52, Hamlet head)

“We visit house after house to check larval breeding. If it is there, we instruct households how to eliminate it. Next time, if it still persists, the household will be reminded about it in the self-governing cluster’s meeting.” (Male, 44, Veteran)

Schools consider education activities on environment in relation to DHF prevention as a long-term measure to change and enhance family knowledge. When these contents are absorbed continuously from childhood, the DHF preventing behaviour will be sustainable.

“Families of young couples with a high level of education also have high awareness because they only have 1 or 2 children and do not want their children to acquire DHF.” (Male, 49, Red Cross)

Discussions and conclusions

The integrated strategy of DHF prevention and control recommended by WHO has ten key elements. Advocacy and implementation of intersectional activities (factor II), effective community participation (factor III), environmental cleaning (factor IV), and integration of DHF into official education (factor VII) are the measures implemented by the local authority in Ben Tre province in order to prevent and control DHF. The implementation of other elements does not belong to the local authority, but the central government organizations (Ministry of Health, Ministry of Education and Formation, Ministry of Agriculture and Rural Development). While awaiting responses from these organizations, Ben Tre local authorities should try their best and do whatever is possible to prevent the occurrence of DHF outbreaks in Ben Tre. The households should be the targets of these measures. To mobilize the households, the impact of the local social unions on each household member through the union activities is necessary. The simple and essential message: “No larvae, no mosquitoes, no DHF” needs to be delivered to everybody and every place in the community. Based on that, social organizations can effectively push activities forward to control DHF in the community.
In the communities where these activities were conducted, there are no outside sponsors or supporters while they implement their own community participatory campaigns to control DHF. The message “No larvae, no mosquitoes, no DHF” is the national campaign message. However, to change these messages into action at the family level would require some appropriate measures. The top-down approach (i.e. a paramilitary, vertically-structured mosquito programme) cannot address this problem. On the contrary, this approach can create a dependent attitude on the measures to be taken by higher authorities, especially by the Ministry of Health. Past experience shows that this kind of approach can bring no benefit to such provinces as Ben Tre. The bottom-up approach (i.e. a community-based approach for mosquito control by source reduction) is more reasonable and effective, but it takes time. The main issue is that a change in attitude can lead to a change in practice faster. It is the significantly negative impact of DHF that moves people and requires them to change their attitude and learn how to prevent DHF from happening. That is a good reason for communication to change people’s behaviour. Because the families in the area understood the meaning of this simple message, it was easy for the local authorities to enlist the cooperation of other organizations, social unions and people in the community, especially school and college students. This seems to follow the same direction with the community-based dengue prevention programmes as in Puerto Rico. However, the difference in Ben Tre is that they got no outside support when conducting the campaign. The initiation of the community participatory campaign originated from the needs of the community itself. Schools play an important role in the DHF control plan. Education and mobilization started at the primary-school level and continued later helps to sustain students’ awareness. Lessons learnt from the DHF control programmes in the Caribbean show that health education on environment is an effective measure to teach children how to eliminate larvae to prevent DHF. In Ben Tre, social mobilization for carrying out environment cleaning campaigns in the community conducted by students at each household have helped change people’s behaviour and contributed much to DHF control. It seems that the bottom-up approach, although slow, has a more sustainable impact because the next generations will understand and accept their responsibility to help maintain DHF control in the community.

Therefore, the community participatory plan to conduct DHF control activities needs to be developed annually. In the plan, communication for behavioural change and mobilization are important to enhance people’s awareness. The lessons learnt from Colombia show that it takes at least three consecutive years for any perceivable change to happen in community awareness. In Ben Tre, a community plan in DHF prevention has been implemented continuously since 1999, and has become a part of the regular activities of the local government and the community. DHF has been brought under control and there has been no recent outbreak.

References


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