

## **CHAPTER V**

### **CONCLUSIONS, DISCUSSIONS, AND RECOMMENDATIONS**

#### **CONCLUSIONS**

This research had the objective of studying knowledge, attitude, and the factors affecting the dengue prevention and control behaviors of family health leaders in Tamode district, Phatthalung Province. The design of this study was cross-sectional survey research among family health leaders who lived in Tamode district, Phatthalung province with the total numbers of 400 people. The investigator collected data by an interview questionnaire. The questionnaire was coded and entered by using the SPSS statistical software package. This study used descriptive statistic including frequencies, percentages, mean and standard deviation. The Chi- square test was used to determine the association between demographic data and the preventive and control behavior of DHF. While using of the Spearman-rank test the association between attitude, the information perception of disease, the sufficiency of resources, the advice and following up by the public health staffs, the attendance on seminar and the joint of activities ant the preventive and control behavior of DHF.

The research results showed that most of the population had a high knowledge level of disease and the preventive control of DHF, positive attitude level of preventive and control behavior of DHF, high information perception on disease and preventive control level of DHF, high the advice and the following up by public health staffs level

when DHF disease had been spread and good practice about the preventive and control behavior of DHF. Prevention and control behavior of DHF was association with the predisposing factors, the reinforcing factors and the enabling factors, but was not association with gender and the educational level of family health leaders.

## **DISCUSSIONS**

According to the data analysis and the conclusion of the research about the preventive and control behavior of Dengue disease among the family health leaders in Tamode District, Phatthalung Province.

The findings revealed some interesting points, which will be discussed as follow:

1. Population data of the family health leaders

The group samples are more female than male because when the researcher made home visit, the male has gone to work. The most of group samples were ages between 31- 45 years old, average income 3,001-6,000 Baht/month, the family's size of 1-4 members. The most of the respondents was married, had agriculture's occupation, and finished primary school. Only 32.2% of the respondents reported not had the attendance on seminar for knowledge of the public health.

According to the relation between the population factors of the family health leaders to the preventive and control behavior of Dengue disease it had been found that ages had been positively relevant to the preventive and control behavior of Dengue disease, in which every ages group had been differently to the preventive and control

behavior of Dengue disease with significant at P-value  $<0.01$ , while income had been positively relevant to the preventive and control behavior of Dengue disease, in which the high income group and the low income group had been differently to the preventive and control behavior of Dengue disease with significant at P-value  $< 0.01$ . However, the study by *Sriamporn Makmog (1999)* had found that genders, attitude, income had been irrelevant to the preventive and control behavior of Dengue disease, while other factors such as genders, marital status, religions, the educational levels, occupation had been irrelevant to the preventive and control behavior of Dengue disease.

2. The knowledge about disease and the preventive control of Dengue disease.

The overall knowledge about DHF disease and the preventive control of dengue disease found that the group samplers had knowledge in the high level 79.0 %, while 21.0% for the moderate level. This study agrees with *Sangval Chroenrob and colleagues (1997)* who had studied on the knowledge, attitude and the practice for the preventive control of Dengue disease in Roied province in year 1996 from 610 group samplers, in which it had been found that most of the group samplers had the knowledge about Dengue disease in quite excellent level and it was the same as the study by *Pinan Danghan and colleague (1998)* who had studied on the factors which effected to the decision for the practice of the population control of *Aedes* mosquitoes as the disease carriers of Dengue disease of the local administration office in the northeast region, in which the result shown that the main factors that influenced on the decision for the practices such as knowledge of the staff in the local administration office and the officials. The family leaders about the problems of Dengue disease had been in the

good level, in which the knowledge was one of behaviors that had been learnt after the perception of information, listening or experiences and if it had been repeated for many time, the chances of learning and remembering might increase as well. According to the study of knowledge of disease and the preventive control of Dengue disease among the family health leaders had reflected that the group samplers had been lacking of the right knowledge and understanding with some parts such as the knowledge for the preventive control of disease had been missing, that resulted to the ignorance of the practices or having with the wrong practices or only the limited knowledge for examples people carried out the practices only in the rainy season, or having mosquito net only in the nighttime, people who used to catch with this disease seemed to avoid to prevent from this disease, or the practice for the preventive control of disease had not been kept continuously and the frequency of the practices had been insufficient to prevent laying of mosquitoes.

### 3. The attitude on disease and the preventive control of Dengue disease

The study found that the overall attitude on disease and the preventive control of Dengue disease in the high level, this result agree with *Sangval Charoenrob and colleague (1997)* who had studied on the situation of knowledge, attitude and the practices for the preventive control of Dengue disease in Roiied province, year 1996. The study results shown that the group samplers had the attitude on the preventive control of Dengue disease in the upper moderate level as the same as the study by *Pinan Danghan and colleague (1998)* who studied the factors which influenced on making decision for the population control of *Aedes* mosquitoes as the disease carriers of the local administration office in the northeast region. The study shown that the

attitude on Dengue disease had been in the good level, in which it can seemed that the group samplers had been with the good level of attitude because they might have been taught with the good attitude, the information perception and information sources, and the familiarity on practices and experiences that induced to experience with the real situation on the preventive control of Dengue disease, in which it had been the same as the study by *Kamolrat Lasuwong (1981)* who had mentioned that the attitude and the changes had been induced by studying and experiences, the information from experiences, the information perception, teaching and advice, discussion, samples. The attitude about health had been influenced by other people, in which it seemed easily for anyone who had been influenced by other people prier, while teaching or the advertisement by people who had the good attitude might transfer to those people automatically (*Suchart Somprayone, 1982*). *Triandis HC. 1971*, had mentioned that the attitude was the thoughts in which it was leaded by emotion that produced the bias of behavior on any specific situations. So the practices on the preventive control of Dengue disease might take considerably the involved people needed to be careful with the attitudes of other people that might produce the effective ways for the preventive control of Dengue disease in the future.

The relation between the attitude on disease and the preventive control of Dengue disease to the preventive and control behavior of Dengue disease among the family health leaders had been found that, they had been positively relevant with significant at .01( $r = 0.467$   $p=.000$ ) in which, the family health leaders who had the good attitude on disease and the preventive control of Dengue disease seemed to have the good behavior on the preventive control of Dengue disease as well. This study

result had been the same as the study by *Kamolrat Lasuwong (1981)* who had mentioned that the attitude looked like an indicator which pointed the direction to the behavior, in which having good attitude trended to have the good behavior and it was the same as the study by *Nalinee makornseng (1995)* who had found that the attitude about health had been positively relevant to the behavior as defined for the national health standard and it was the same as the study by *Kannika Suwanna (1998)* who had found that the attitude about the health care practices had been positively relevant to the behaviors of the health care practices of students.

#### 4. The information perception about disease and the preventive control of Dengue disease

Most of the group samplers had been with the information perception in the high level. The study had been found that the group samplers had received any kind of information from different sources with the same direction, in which the advice by the public health staffs and the village volunteers had been reached to most people. This study agrees with *Sriamporn Makemog (1999)* who had studied on the factors which had been relevant to the preventive and control behavior of Dengue disease of students in Bureeram Province. It had been found that the most popular information source of the group samples was from the public health staffs and teachers. This shown that the public health staffs had been directly responded for giving the advice and any information about Dengue disease, following by the information source of the group samplers from television and radio, in which it had been different from the study by *Pornpimol POUNGNGAN (1994)* and *Sawangchai Chaikit (1994)* who had found that the group samples had mostly received the information by television in which it shown that

the ministry of public health had promoted for elimination of breeding area of Aedes mosquitoes on television for the whole year. The concept had been launched with the short and nice message along with the amusing music that made people easily to remember and follow. So the group samplers had received the information by many times that shown that the information on television enabled to reach the target group widely and quickly because nowadays television had become the popular equipment in every family as can be seen from the survey of more than 90% of the group samplers' families had own televisions. However, television had been with the limits on the high cost that some circumstances could not affordable, and also the presentation with pure knowledge seemed to be less interesting by people or the target group, especially people in the rural areas who preferred to watch television particularly on the entertainment program.

According to the relation of the information perception about disease and the preventive control of Dengue disease to the preventive and control behavior of Dengue disease among the family health leaders had been found that they had been positively relevant with significant at  $.05(r=0.165, p=.001)$  in which the family health leaders who had regularly received the information about disease and the preventive control of Dengue disease seemed to have with the good behavior of the preventive control of Dengue disease. This could be explained that the new information perception had influenced on the living ways of people, so if they had received the proper information about Dengue disease and the preventive control of disease by the appropriated sources, it might improve the preventive and control behavior which shown with the same result of the study by *Kanokwan Vatsin (1995)* who found that the

information perception about Aids had been positively relevant to the intention for the preventive practices with Aids of students.

5. The sufficiency of resources for the preventive control of Dengue disease.

Most of the group samplers which counted as 54.5% had been with the insufficient level of resources for the preventive control of Dengue disease, in which it had the same as the study by *Vipa Limkamsuk (1997)* who found that in families which had been found with Dengue disease might have the mosquito net with out of order and many families had been with insufficiency of mosquito net for everyone in the family, this had the same result as the study by *Wannapa Yanviroj (1991)* who found that the group samplers who lived in the area with the high rate of Dengue disease had been found with insufficiency of cover for every water container higher than the group samplers who lived in the area with the low rate of Dengue disease. This could be explained that the resources had been very important for the supporting factors on behavior, whereas lacking of resources might obstruct to carry out the behavior as the same as the study by *Apichart Makmasin and colleague (1996)* who found that the problems to proceed the prevention of Dengue disease program were the insufficiency and delay of the support of media on the health education and the chemicals. The insufficiency of resources for the preventive control of Dengue disease might limit the choices for the preventive control of Dengue disease and it may cause of the problems that led to the further problems of the wide spread of Dengue disease.



According to the relation between the sufficiency of resources for the preventive control of Dengue disease to the preventive and control behavior of Dengue disease among the family health leaders had found that they had been positively relevant with significant at .01( $r=0.982, p=.000$ ) in which the group samples who had the sufficiency of resources seemed to had the preventive and control behavior of Dengue disease better than the group who had with insufficiency of resources. This may be explained that resources had been very important to take out with the preventive control of Dengue disease, if lacking or insufficiency might affect to the practices as the same as the study by *Apichart Makmasin (1996)* who found that the problems for the preventive control of Dengue disease program at school such as the support on the health education and chemicals had been delayed or with insufficiency as the same as the study by *Sathean Sathapong (1986)* who found that the factors that influenced on the ignorance of practice or the improperly health behavior of the primary school students due to lacking of supporting factors such as lacking of mosquito net, or lacking of toothbrush, without toilet etc.

6. The advice by the public health staffs about disease and the preventive control of dengue disease.

The study found that group samplers had received the advice from the public health staffs in the high level. It had been the same as the study by *Sriamporn Makemog (1999)*, in which most of the group samplers had received the advice about the causes of the infection of disease whereas the least advice of the group samplers from the public health staffs was the observation of the symptom of people who had infected with Dengue disease, while many public health staffs had said that the advice

about the symptom had been made by following on the concept in the textbook or handbook about Dengue disease without any applicable method or transferring techniques that made easily to understand for the group samplers.

According to the relation between the advice and following up by the public health staffs about disease and the preventive control of Dengue disease to the preventive and control behavior of Dengue disease among the family health leaders had been found that they had been positively relevant with significant at .05 (  $r = 0.126, p = .012$  ), in which the family health leaders who had regularly received the advice and following up by the public health staffs about disease and the preventive control of Dengue disease seemed to have the good behavior on the preventive control of Dengue disease. It can be explained that the staffs had behaved like the health presenter who led the development of the health behavior of people, while the following up and education about health to people regularly might induce people to get more understanding and recognize for the values of the healthy condition which helped to develop the capacities of those people in applying the knowledge to the daily real lives such as the practices on the preventive control of disease as well. It had shown on the same study by *Nipa Likitprasert (1989)* who found that the public health staffs who had been accepted by people who used the abate sand seemed to work about the preventive control of Dengue disease more effective than the public health staffs whom people had rarely accepted for using abate sand and it was the same as the study by *Patom Nounkam (1992)* who found that the advice about the preventive control of the lacking iodine disease had been positively relevant to the behavior of the salt consumption.

7. The attendance on seminar and the joint of the promotion activities for the preventive control of Dengue disease.

From this study most of the group samplers had not attended on seminar or the joint of the preventive control of Dengue disease because they thought that it might take a long time on those activities and it was a big crowd which was unable to afford to the smaller group of people and some of them thought that the staffs had lacked of the management on solution and lacking of knowledge and skills to carry out the stage. So the staffs had been very important to carry out the stage and they might have the good skills to run the activities.

The relation between the attendance on seminar and the joint of the promotion activities for the preventive control of Dengue disease to the preventive and control behavior of Dengue disease had found that they had been positively relevant with significant at .01 ( $r = 0.211, p = .000$ ), in which the family health leaders who had regularly attended on seminar and the joint of the promotion activities for the preventive control of Dengue disease seemed to have the good behavior of the preventive control of Dengue disease, in which it was the same as the study by *The Department of disease control, Ministry of Public Health (2001)* which found that the joint for the activities of the preventive control of Dengue disease, the elimination of the larvae of mosquitoes had been performed on the same pattern in every community, while most popular activity in every region was the promotion activities, following by the survey and elimination of the larvae of mosquitoes, this result could be explained that if every community had cooperate for elimination of the larvae of mosquitoes and

having activities on the preventive control of Dengue disease, then the preventive control of Dengue disease might be successful.

8 The preventive and control of Dengue disease among the family health leaders.

The study found that most of the group samplers had the scores of the preventive and control behavior in the high level. The study different from *Chuanong Arsarat (1994)* who found that most students as the group samplers had the moderate level for the practice of the preventive control of Dengue disease and it was different to the study by Sawangchai Chaikit (1996) who found that the housewives had the preventive and control behavior of Dengue disease similarly at the low level , which differed from the study by *Pornpimol Puangngn (1994)* who found that most of the group samples who were the family's members had with the low level of the practices of the preventive control of Dengue disease. As can be seen from the study, although most of interviewees had the educational level in the primary school level, but they had been in the high level of knowledge about Dengue disease that resulted to the high level of practice as well. According to the levels of behavior differed from other studies because the group samplers had been different ages and this study had been similarly to the theory of Schwartz (*Chalernpol Tonsakul, 1998*) referred in (*Chuanong Arsarat, 1994*) which had shown the relation of knowledge, attitude and the practices on the knowledge might effected to the practice both of the direct and indirect way, while the indirect way comprised of the attitude, in which it may be said that the knowledge level might effect to the practices as well, while the knowledge had been very important to make understanding and inducing to take on practices. Whereas teaching and the

motivation by people around, from the public health staffs or the information perception by any media might encourage the group samplers to take on practices for the preventive control of disease. It had the same result as the study by *Surachai Silawan (1996)* who found that the practices of most students had been insufficient to prevent the laying of mosquitoes, the researcher had own opinion that it might caused the wide spread of Dengue disease in the community.

## **RECOMMENDATION**

According to this study, the researcher would like to put the proposals that was applied with the study's result for the preventive control of Dengue disease and the improvement of the preventive and control behavior of Dengue disease among the family health leaders as shown by follows

1. Knowledge about the symptom of the infected people with Dengue disease – the public health staffs needed to offer the knowledge to the family health leaders to enable observe the basic symptom due to the first state of Dengue disease had been similar to the common fever, in which it needed to be added with knowledge as well.

2. The knowledge about people's age group who had been with the high risk with Dengue disease – the public health staffs and the village volunteers needed to take knowledge on some specific group of ages due to the children had been the highest risk to infect with Dengue disease, so it was very important to prevent the children from disease.

3. The support to induce the family health leaders on recognition for the importance of the practices in the preventive control of Dengue disease continuously.

While, the village had been the good example for the practices, so they needed to be improved on the knowledge and motivated on practices, in which the regular practice might enable to prevent the increasing numbers of mosquitoes. So the public health staffs needed to motivate people to have regular practices such as the elimination of breeding area of mosquitoes every Friday or other days the they feel comfortably by at least 1 time per week.

4. The study shown that some of medias such as document, handbill had not been interested to the family health leaders, while the voice on line and the broadcast tower had been rarely accessed due to they were out of order. So the involved people needed to take other method to promote people.

#### **RECOMMENDATIONS FOR FUTURE STUDIES**

1. The study could include to other factors that may be relevant or influenced to the preventive and control behavior such as the environmental factors, housing types of the group samplers.

2. The future study needed to study in form of the practical research by using the results of this study for making plan on the preventive control of Dengue disease and then studied on the efficiency of the results from this research to solve the problems on the preventive control of Dengue disease among the family health leaders.

3. The study an evaluation on the practices of the public health staffs which involved to the preventive control of Dengue disease.

4. The study about the medias and the appropriated types for each target group and the information distribution methods in which it enabled to reach to the target group.

5. The study about the antibody of people to study about the situation of epidemic and known the group with risk for the spread of disease.

6. The study on the preventive control of Dengue disease by the participation of people in community.

7. The study on using the legal roles to control the larvae of mosquitoes and the breeding areas of mosquitoes.

8. The study on the preventive control of Dengue disease by using the local wisdom.