

## **CHAPTER V**

### **CONCLUSION, DISCUSSION AND RECOMMENDATION**

The results of the evaluation of family health leader development project of Na Khao Sia Sub-district, Na Yong District, Trang Province, can be concluded and discussed according to the study framework consisting of input, process, output and outcome as follows:

#### **5.1 Conclusion**

##### **5.1.1 Input**

The input of project in terms of personnel consisted of district public health officers, village public health volunteers and 243 family health leaders (December 2003) had appropriate the qualifications to implement the project. However, the operative budgets were still not sufficient and continuous because they were shared with other activities. In terms of the project follow-up, the lecturers were appropriate; the supporting training documents were sufficient; the usage of audio visual aids for lecturing was proper; the lectured contents covered the problems of each area; the training places were appropriate as the community had participated in selecting the place. In addition, there were five levels of administrative management, that is, provincial, district, sub-district, village and household levels; all levels coordinated well with each another according to the project.

### **5.1.2 Process**

The yearly selection of family health leaders was different as the community and families had participated in such selection. In terms of training, there were two types of training, namely, group training when there were a lot of participants and individual training during the follow-up of PHVs and public health volunteers; however the early follow-ups of the project could not be conducted according to the established plans.

### **5.1.3 Output**

In terms of knowledge evaluation of local diseases, the knowledge level of AIDS in terms of prevention and symptoms was high; the knowledge level of hemorrhagic fever was medium; the knowledge level of diarrhea was high; the knowledge level of diabetes was high and the knowledge level of hypertension was high. Although the evaluation level of primary care when catching a cold was high, the primary care to reduce fever was low. The knowledge evaluation level of fundamental public health services was low in terms of family planning and immunity, whereas, the pre-natal care, nutrition, application knowledge and consumer protection were high. In addition, the knowledge evaluation of health insurance (30-Baht Card) was high because the health insurance cards had been widely used.

When testing the relationships between personal factor of educational level and knowledge level, there was a marginal relationship. In addition, it was found that family income was associated with knowledge level where those with higher income had higher levels of knowledge.

#### **5.1.4 Outcome**

In terms of behavior of local diseases, AIDS could not be evaluated by questionnaires because there were no AIDS patients in the area. The behavioral level of hemorrhagic fever was medium, in terms of prevention, but it was at a high level for the practice. The behavioral level of diarrhea was medium, in terms of prevention, but at a medium level for practice. The behavioral level of diabetes and hypertension was high, in terms of prevention, but at a medium level for the practice. The behavioral level of primary care when catching a cold was medium, in terms of prevention, but at a high level for the practice. The behavioral level of fundamental public health was high, in terms of family planning, immunity establishment, pre-natal care but at medium level for nutrition of children below 5 years old. In addition, in terms of health insurance behavior, the sample group had health insurance card with the high level of application.

When testing the relationships between personal factors and behavioral level, it was found that age factor was related to behavior, whereas, the relationships between educational level, average income and behavioral level were marginal.

## 5.2 Discussion

As the family health leader development project had been operated according to the policy throughout the country, Trang Province began such project in the same period of other provinces. According to the previous performance, there were still a few studies concerned with the project. However, in 1999, Trang Province had evaluated the family health leader development project (Champen Charnchai et al., 1999). Later, in 1999, there was the study of learning development system and knowledge level about self-health care of family health leaders in the Northeastern region (Vanida Virakul & Tawil Lerkchaiyaphum., 1999). In 2000, there was the study of outcome of hygienic activities in Trang Province incorporated with the social support from village public health volunteers in terms of knowledge and behavior of the family health leaders in terms of the prevention of hemorrhagic fever and diarrhea (Theerasak Makkun et al. (1999). In 2001, there was the study of social situations and psychological aspects concerned with the self-health care of the family health leaders in Chachoengsao Province (Phannarai Pitakcharoen et al., 2001). In the same year, there was the study of the leaning development ways and systems for family health leaders in Surin, Sakon Nakhon and Amnaj Charoen Province (Vanida Virakul & Tawil Lerkchaiyaphum., 2001)

In this study, the researcher had evaluated the family health leader development project of Na Khao Sia Sub-district, Na Yong District, Trang Province. The researcher selected the area, where had been operated according to the project for five years. In terms of data collection, there was the coordination with the public health officers of all levels and public health volunteers in the area. In addition, the selection of this study

site was based on the fact that Na Khao Sia Sub-district implemented the project according to the family health leader development project with the most available data.

The evaluation of the project of Na Khao Sia Sub-district could be compared with other studies as follows: The sample group, that is, the family health leaders and the family health care providers were both male and female; however, the persons selected to be family health leaders in the Northeastern region were housewives. (Vanida Virakul & Tawil Lerkchaiyaphum., 1999)

In terms of trainings provided to the target group, the lecturers were the sub-district public health officer which was the same as the project in the Northeastern region, where the public health officers were the main lecturers (Vanida Virakul & Tawil Lerkchaiyaphum., 1999). However in Surin, Sakon Nakhon and Amnaj Charoen Provinces, the lectures and demonstrations were conducted by the public health officers and PHVs (Vanida Virakul & Tawil Lerkchaiyaphum., 2001) because the selection of lecturers living in the area might be more convenient than inviting trainers from outside the project area. In addition, the qualifications of the lecturers were appropriate, in terms of knowledge, readiness and understanding of public health of the community. Allowing the PHVs to participate as the lecturers depended on the readiness and potential of such PHVs in each area. Therefore, there should be the process provided so that the participants could gain knowledge, understanding and practical application. In addition, there should be supporting documents like in the Northeastern region. (Vanida Virakul & Tawil Lerkchaiyaphum., 1999)

The consideration of curriculum and contents were stipulated by the sub-district public health officers. This was different from the project in the Northeastern region where the curriculum and contents were based on the District Public Health Office (Vanida Virakul & Tawil Lerkchaiyaphum., 1999). In addition, the audio visual aid, such as, television had been used in the trainings, the same as in Surin, Sakon Nakhon and Amnaj Charoen Provinces. (Vanida Virakul & Tawil Lerkchaiyaphum., 2001)

In terms of training contents, there were knowledge contents in terms of local diseases, health care when catching a cold and fundamental public health services. The contents were sufficient so that the operation could be achieved according to the objective of the project. In general, the contents were resembling to the contents stipulated in the provincial level as same as in the Northeastern region (Veerakul and Lerkchaiyaphum, 1999) and also in Surin, Sakon Nakhon and Amnaj Charoen Province (Vanida Virakul & Tawil Lerkchaiyaphum., 2001). Additionally, the critical public health of the Southern region was the same as the one in the Northeastern region.

The selection of family health leaders had been emphasized on the participation of community considering that the success of operation in the community was depending on the participation of the persons in community. Thus, allowing the community to participate in thinking, making decision and operating affected to the success of the project as same as the project of the Northeastern region. (Vanida Virakul & Tawil Lerkchaiyaphum., 1999)

The methods of training were regarded as the communication providing knowledge to the sample group so that they gained knowledge in terms of disease prevention. The group lecture was appropriate for knowledge providing to a big group of person within the specific period. In addition, there was knowledge providing from the visits of PHVs and public health officers, which was suitable for each family problem as same as the project in the Northeastern region (Vanida Virakul & Tawil Lerkchaiyaphum., 1999) and also in Surin, Sakon Nakhon and Amnaj Charoen Province (Vanida Virakul & Tawil Lerkchaiyaphum., 2001).

In conclusion, when compared with the operation of family health leader development project in other provinces, the project operation of Nayong District was similar, in terms of input, such as, the selection of lecturers, the curriculum, contents, training period and the usage of audio visual aids. According to the process, in terms of the selection of family health leaders, the operation of the project was quite distinct; thus the procedures of input and process were similar in all provinces.

According to the knowledge evaluation, in terms of local diseases of sample group, the knowledge level of AIDS was high because AIDS was considered as the critical health problem at both the provincial and national levels. In addition, as there were various ways of health education and channels of knowledge, the villagers had numerous opportunities to repeatedly acquire and retain the. This circumstance was similar to the family health leaders in the Northeastern region where the knowledge level of AIDS was good. (Vanida Virakul & Tawil Lerkchaiyaphum , 1999)

The knowledge of hemorrhagic fever was at the medium level, although there had been knowledge providing for several times as there were a lot of details in terms of the communication, causes, symptoms of patients, care and prevention, which should be learned for the correct practice. Therefore, this was different than the project in the Northeastern region where the family health leaders had the knowledge of hemorrhagic fever in the good level. (Vanida Virakul & Tawil Lerkchaiyaphum., 1999)

The knowledge of diarrhea was at the high level like in the Northeastern region (Vanida Virakul & Tawil Lerkchaiyaphum., 1999). The knowledge level found in this study differed from the study conducted in Trang Province in 1999 by Charnchai et al. where the family health leaders, in 1999, had the medium level of diarrhea. The improvement in knowledge may be due to the fact that providing knowledge in managing diarrhea had been a priority in Trang province because diarrhea continued to be a long term public health problem in the area, Even there was only a patient of diarrhea, the public health officers and PHVs would provide the knowledge in terms of prevention and diseases searching for the villagers in the community. Thus, there was the alertness of community and the rapid spread of health care information. The evaluation of diarrhea conducted in different years might affect on the knowledge level because as the time went by, there were various sources of information such as television, radio, brochures including continuous activities encouraging the villagers to gain much knowledge.

The knowledge of diabetes was at the high level because of the continuous knowledge activities and examination provided for diabetes patients which was the



same as the project in the Northeastern region (Vanida Virakul & Tawil Lerkchaiyaphum., 1999).The knowledge of hypertension was at the high level because of the continuous knowledge activities and examination provided for hypertension patients was the same as the project in the Northeastern region (Vanida Virakul & Tawil Lerkchaiyaphum, 1999).

According to the knowledge evaluation of primary care when catching a cold, the knowledge was at the high level like in the Northeastern region (Vanida Virakul & Tawil Lerkchaiyaphum., 1999) but different from Trang Province (Champen Charnchai et al. (1999) because in 1997, the project was just commenced; thus, there was no knowledge accumulation of the sample group. However, as the time went by and there were the activities concerned with the health care; therefore the sample group gained much knowledge.

When testing the relationships between personal factor, i.e., educational level and knowledge level, there was a marginal relationship which was similar to the project in the Northeastern region. In addition, it was found that family income was also related to knowledge level similar to the project in the Northeastern region. (Vanida Virakul & Tawil Lerkchaiyaphum, 1999)

Additionally, age was associated with behavior which was similar to the project in Chachoengsao Province where the older family health leaders had better health behavior than the younger family health leaders. (Phannarai Pitakcharoen et al., 2001) However, the relationship of other personal factors in terms of educational level,

average income and behavioral level had a marginal relationship with behavior which was similar to the project in Chachoengsao Province, where the family health leaders having higher education had much proper health care than the ones having lower education (Phannarai Pitakcharoen et al., 2001).

In conclusion, the sample group had high level of knowledge, in terms of AIDS, diarrhea, diabetes, hypertension, and cold, which resembled to the family health leaders in the Northeastern region. However, the family health leaders had the medium level of knowledge whereas the knowledge level of family health leaders in the Northeastern region was high. In addition, the sample group had low level of knowledge, in terms of wiping the body to reduce a fever for children.

The sample group had high behavioral level, in terms of the prevention of diarrhea, diabetes and hypertension, whereas, the prevention of hemorrhagic fever and cold was at the medium level. In the opinion of the researcher, in terms of family health leader development, importance should be paid to the hemorrhagic fever and the fever reduction by wiping the body because the sample group still had low knowledge level; as a result, the preventive behavior of hemorrhagic fever was still in the medium level. If there were much development, the preventive behavior should be higher accordingly.

According to the family health leader development of Na Khao Sia Sub-district, the success of the performance was attributed to many factors. Partially, the achievement was due to the personal qualifications of public health officers responsible for the project because these officers were, themselves, the local villagers of the

community and had worked as public health officers for a long period. In addition, they were interested in the family health care. Thus, the project received cooperation from the community. Having efficient community leaders and PHVs including the readiness of the community was the other factor contributing to the success. Additionally, the researcher found that the operation of the project was the beginning of the health care of the community encouraging the villagers to be alert. Moreover, the performance of other projects in the community, such as, Prevention and Control of Hemorrhagic Fever Project, Prevention of Diarrhea Project, Royal Glory Project, Aged Project, Non-Infectious Disease Project (diabetes and hypertension) including Prevention and Control of Uterus Cancer Project and the continuous news / information receiving from various media played a significant role to this study's sample group having the correct knowledge and behavior. Although these effects were not derived directly from the family health leader project itself, they, nevertheless, contributed to the achievement of the project's objectives.

In addition, translating the project policy into action was quite clear, therefore, the performance of the Southern and Northeastern regions were similarly implemented. However, the operating budgets were insufficient and were not directly allocated to the project leading to the administrative problems and managerial obstacles. Thus, the public health center had to be resourceful and managed the budget more judiciously. Sometimes, in case of insufficient budgets, they had to manage and solve problems by themselves. For instance, they had to manage the budget for their meals and sometimes they even had to use their own expenses. The budget support for all pilot projects was 3,000 Baht and increased to 7,500 Baht. However, the budgets were still not sufficient

for establishing activities or for solving any problems in the village. Additionally, the budgets were not allocated proportionally to the population in the village because villages with many villagers could not be managed sufficiently according to the project.

In terms of the project evaluation, there should be coordination between the persons responsible for the project, the evaluators and the ones being evaluated because there would be benefits in evaluating all levels of the project. Actually, the family health leader development project of Trang Province started in 1998 which could be regarded as the pilot project encouraging the villagers to learn to take care of their health at individual and family levels. Having developed the family health leaders, the Ministry of Public Health planned for other projects, which paid importance to the family health leaders. In addition, there was continuous development for family health leaders in various aspects, so that, they could take care of the health of their family members. However, the leaders might be the same or different persons of the family health leaders, such as, the leaders of exercising, who could be anyone being interested could be the possibility to develop the health care knowledge for the family level.

### **5.3 Recommendation**

According to the evaluation of family health leader development project of Na Khao Sia Sub-district, Na Yong District, Trang Province, the researcher has the following suggestions:

### **5.3.1 Suggestions for Further Research**

1. According to the operation of family health leader development project in Trang Province, each area had different operations. Thus, the ways of family health leader development should be studied in the further research and evaluated in different ways.
2. The evaluation of this project dealt with local diseases, primary care, fundamental public health services and health insurance, which contained a lot of contents. Therefore, the research could not be exhaustively conducted. Thus, in the further research, only one or two contents necessary to the health care of target group should be selected.
3. The operation of the project, in terms of, providing knowledge was to solve the problems prevalent in the area, therefore, the output evaluation should be conducted after trainings that target these area specific problems.

### **5.3.2 Suggestions for Family Health Leader Development Project**

1. There should be the revision, in terms of the project including its policy. As the Ministry established the nationwide policy of the Family Health Leader Development Project, there was a lack of participation from the local areas. In addition, there was no consideration, in terms of, necessity and needs including the differences of community. In terms of the budget, there was no continuous support due to a lack of good plans; thus the budget was provided only for the first year operation. Additionally, the family health leaders had the same knowledge when

compared with the family health care providers, who did not participate in any training. As there were other projects operated in the community, there was consequently no need to develop the family health leaders. However, the public health officers should exploit the new proper methods to encourage the family members to take care of their health care and disease prevention.

2. In terms of the potential development of family health leaders, there should be the regular providing of knowledge, at least two meetings per year. In addition, the various media and methods consistent with the lifestyle of community should be used, such as, videos or tapes, which could be broadcasted through the village news tower; thus, the villagers could listen to the news during their normal routines. Accordingly, there should be the support for the operation of amplifiers.
3. In some cases, the number of households under the responsibility of PHVs was higher than the standard, that is, 15-18 households; thus, the supervision and follow-up were not continuous. Actually, as a PHV should be responsible for 10 – 12 households, there should be an adjustment for the appropriate proportional number of households to PHVs.
4. In terms of the trainings, the contents should be divided into groups. While providing individual knowledge was still necessary, providing group knowledge should be conducted separately to each target group, i.e., elderly, students, or exercising group because the target groups could learn more efficiently.

5. The operation of the family health leader development project in the village played a significant role to the interest and attention of health in the community encouraging the villagers to be alert. As the PHVs had worked as the area mentors, there should be concurrently knowledge development process.

### **5.3.3 Problems and Obstacles of Research**

1. There had to be two phases of data collection performed by interviewing the public health officer because the public health officer had a car accident and had taken a leave for a month. Moreover, the interview and the data collection could not be performed immediately because the officer still had a headache. Consequently, the data collection was delayed from the schedule.
2. The data collection performed by observation had been conducted in the summer time during January to April 2004. According to the data, the larvae of Culex mosquitoes could not be found as the water was not sufficient in the summer time; there were additionally a few wells or there was nearly no water in some jars. Therefore, these circumstances could affect on the error of behavioral evaluation in terms of the prevention of hemorrhagic fever. As a result, the observation and the investigation of larvae of Culex mosquitoes could not be performed.
3. The qualitative data collection in terms of the application knowledge level of the sample group had been conducted in the rainy season, that is, during May to July 2004 where it had been raining throughout the month.

The data collection was performed by interviewing. As the researcher had to go collecting data by a motorcycle in the rainy season, some data could not be collected and were postponed to other occasion. In addition, the appointments of interview had to be postponed and re-appointed to other occasions. Consequently, the data collection was delayed from the schedule.

#### **5.3.4 Limitations of Research**

1. Since the project had been operated for five years, the data collection in terms of input and process might be incorrect or unavailable. Thus, there was no data collection in terms of documentary research; however, the problem could be solved by interviewing the public health officers responsible for the project. Therefore, there should be a plan of data collection prior to the project establishment, which could be used in the project evaluation.
2. The family health leader development project could be evaluated only in the sub-district level; thus it could not be evaluated in the district nor the provincial levels due to the limitation of study period and budget. Therefore, the outcome of research was recognized as the example of the project evaluation for the sub-district level only.
3. There would be some errors when the data collection was performed by using questionnaires due to the memorization because if the sampled family health leaders could not remember, they could not answer correctly; even they could answer correctly, they just guessed the answers.