

CHAPTER 7

CONCLUSIONS AND RECOMMENDATIONS

This chapter concludes the research study and then briefly reviews the limitations associated with study design and their application. Finally, we describe some recommendations for further study.

7.1 Conclusions

This study concludes with the achievements of our objectives:

1. Determine the level and patterns of utilization of malaria diagnosis and treatment services in the study area.
2. Estimate the costs to the patients in seeking those malaria services.
3. Identify and prioritized the factors which influence the utilization of those malaria services.
4. Assess the ability and willingness to pay for those malaria services.

In the study area, utilization of malaria diagnosis and treatment services by the respondents is 80.3% and it is quite a satisfactory level of utilization in relation with other studies in Thailand. This is attributed by relatively good quality of malaria services, widespread distribution of health education (though they have low level of general education), active community participation as a result of strengthening of PHC programme.

In case of patterns of utilization, we are still in need to improve the treatment seeking behavior of community because self-medication (17.5%) was a major alternative for treating malaria. In fact it is not only a costly but harmful behavior and we should search a suitable approach to solve this problem by doing further research.

In this study income is negatively associated with utilization of formal malaria services. The reason may be that they thought the formal malaria services in combination (malaria clinic, VMV and health center) are of inferior goods in comparing with alternative facilities. But our findings show that the utilization of malaria clinic is high, that of health center is low and that of VMV is a median one. Thus the feeling of community about inferior goods is attributed by low perceived quality of health center and less availability of VMV because

it was available only in one hamlet in this study area. Therefore the further studies are necessary to search the possible approaches to solve these problems.

Regarding with patient's cost which included travelling, food costs as an explicit cost and implicit cost was time cost during seeking care at formal malaria services. Major portion of that cost was covered by travel and time costs. Both of them depend on distance between home, service point and convenience of travel, and waiting time at the service point. For decision maker and health planner, to reduce the patient's cost they should reconsider about the deployment of the malaria services and staffs, how to improve the quality of malaria services and how to extend the transportation and communication by multisectoral collaboration with other sectors.

At the same time, reduction of duration between onset of malaria symptoms and seeking care at the formal malaria services should be taken into account to reduce the patient's cost and to solve the drug resistant problem of malaria especially falciparum malaria. It is also important to reduce the time between the onset of malaria symptoms and receiving the adequate, proper and specific treatment of malaria. In this case rapid and effective diagnostic method like "Parasight Test" should be considered to use in malaria endemic areas.

As a result of multiple regression analysis, we can prioritize the factors which influence the utilization of formal malaria services. They are sex, perceived quality of service, frequency of attack of malaria, patient's cost, household consumption and income in descending order. By knowing the effects of these factors, we can improve the efficiency of malaria control programme and also equity and accessibility issues. We should not forget other factors that are not significantly associated with utilization in this study because there are many variations in relation with socio-demographic, economic conditions, and malaria situation.

According to this study, we can draw a conclusion about WTP for formal malaria services that it could be possible to introduce user fees system in this study area. The population is relatively poor in comparing with other area of Thailand. This result could be applicable in some other areas in concern with ability to pay points of view.

7.2 The Limitations of the Study

The limitations of the study are summarized as follows:

1. This study was conducted in a defined area of Suan Phaung District, Ratchaburi Province which is located near Thai-Myanmar border. It will have peculiar malaria problem (border malaria) because of frequent migrations of people from one country to another. The community of that area may also have different socio-economic condition from other parts of country. Because majority of people are partial Thai citizens and they are not allowed to live out side this Province.

They are provided lands for living and cultivation of crops by the government. Thus the findings of this study may be hardly applicable for other Provinces with different situations.

2. Because of constraints for getting enough sample sizes we are able to use purposive sampling method.

3. At first it was planned to conduct the research by interviewing the patients attending the sector malaria clinic to compare the results of household interviews. However, we can not do it because a few patients are coming to sector malaria clinic due to seasonal fluctuation. It will be very difficult to get enough samples with limited time.

4. We chose the samples who had experiences of malaria attack within one year. In fact one year period is too long to remember about disease. But malaria is different from other diseases it could be recalled a past experiences which happened quite a long time. It may be difficult to remember exact data about patient's costs.

7.3 Recommendations for Further Study

1. A comparative study that covers two or more provinces which have different malaria situations and socio-economic status is recommended in order to verify the effects of the factors influencing the utilization and willingness to pay for malaria diagnosis and treatment services.

2. It will be more appropriate to investigate both household respondents and patients attending the service points. By the way we can compare two different population groups and can get more reliable cost data.

3. It will be more appropriate to explore the willingness to pay for malaria diagnosis and treatment services when user fees system has already been introduced. And it will be more preferable to conduct a research on WTP for those services in combination with improving quality of services.