#### **CHAPTER VI**

### CONCLUSIONS AND RECOMMENDATIONS

#### 6.1 Conclusions:

The total cost from provider perspective of combined ACD and PCD method was 1,427,800.23 Baht. The number of 35 newly detected cases was found. The cost-effectiveness ratio was 40,794.29 Baht. The total cost from provider perspective of PCD alone method was 1,340,230.20 Baht, it found out 16 newly detected cases. The cost-effectiveness ratio was 83,764.39 Baht. A study of the cost-effectiveness of new leprosy case finding between the rapid village survey and by community leaders in Huayrat district, Buriram province and Thailand by Manitsirikul S. et.al., (2001) indicates that the total cost of RVS at 58,586.95 Baht for 3 newly detected leprosy cases (1 case per 19,528.90 Baht), the total cost of case finding method by community leaders at 16,409 Baht but could not find new case. This finding may increased the cost from inflation with yet another reason.

I analyzed the cost-effectiveness ratio (from provider perspective) of combined ACD and PCD versus. PCD alone method between non-endemic and endemic areas. In non-endemic areas, the cost-effective ratio of PCD alone is 2.2 times higher than the cost-effective ratio of combined ACD and PCD method, and the cost-effective ratio of PCD alone in endemic area is 1.9 times higher than the cost-effective ratio of combined ACD and PCD method, because the number of newly detected cases in endemic areas is more than the number of newly detected case in non-endemic areas.

The total costs from a patient perspective are similar in both methods. In non-endemic areas, they are 2.2 times higher than in endemic areas. The cost-effectiveness ratio of the combined ACD and PCD method in non-endemic areas and in endemic areas was 1,361.18 Baht and 231.50 Baht respectively. The cost-effectiveness ratio of the PCD alone method in non-endemic areas was 1,345.33 Baht and in endemic areas 816 Baht.

When I use a weighed calculation, in non-endemic area, the cost-effectiveness ratio of combined ACD & PCD is 73,041.20 Baht and of PCD alone is 92,749.90 Baht. In endemic area, the cost-effectiveness ratio of combined ACD & PCD is 78,362.20 Baht and of PCD alone is 93,630.60 Baht. At the regional level, the cost-effectiveness ratio of combined ACD and PCD is 74,976.22 Baht and PCD alone is 93,070.15 Baht. It mean that the cost-effectiveness ratio of PCD alone method is 1.27, 1.19, and 1.24 times is higher than combined ACD & PCD method in non-endemic area, endemic area, and region level respectively.

Therefore the study concludes that the combined ACD and PCD method successfully detected more number of cases than PCD alone method. At the time of detecting by ACD, 8.7% cases had disability grade 2. This may be a reflection of a delay in case detection of PCD alone method. This result is similar to the study by Schreuder, P.A.M. et al. (2002), who studied a comparative of rapid village survey and Leprosy Elimination Campaign detected methods in districts of East Java, Indonesia. They found that "There is still a serious delay in detecting new cases under the routine programme". And the report on the economics of early leprosy case detection using the data from Thailand by Kaewsonthi and others (1995), found that rapid village survey and contact survey are viable actions, economically, to finding early case detection.

# 6.2 Limitation of the study:

The facts are the weakness of this methodological study because of some constraints in the real situation.

- Since this study was conducted under the time frame constraint, some data and
  information were not available as per needed, especially for capital item. There
  was not much information system to record all major equipments, building cost
  and vehicle cost. Because most of the health center are more than 20-30 year
  duration.
- The cost incurred by national leprosy program to provide supervision and monitoring was not calculated in this study.
- Recall bias of the primary data from patient and provider side.
- The two compared methods; combined ACD and PCD and PCD alone method; were carried out under different setting.



- We can not measure intangible costs (stigma of leprosy).
- The study result is difficult to be generalized.
- Some data are still missing. I have to omit some data, for example, in the case
  of capital cost, purchased dates or values of equipment or building are not
  recorded.
- Lack of a good data collection system.

# 6.3 Policy implication:

The study concludes that the combined ACD and PCD method is more costeffective than the PCD alone method. According to the results explained earlier, the combined ACD and PCD method should be given more priority especially in endemic areas. Therefore, the allocation of the budget for case finding activities should take endemicity of targeted areas into consideration.

There is no doubt that the combined ACD and PCD method is the costeffectiveness case finding activity to find out backlog (hidden cases) (such as ignorance of the signs and symptoms of disease, lack of skill among general medical practitioners in diagnosing leprosy, the social stigma attached to the disease, low accessibility and affordability of health services, and certain cultural beliefs and practices) in the community.

The policy maker of national leprosy programme should use the solution provided in this study as reference information to conduct the social mobilization activities (during Raj Pracha Samasai week or National leprosy awareness week). Important in this respect are the results from the sensitivity analysis, which show that if the social mobilization is carried out in all villages (100%) coverage, the cost will be higher than conducting only 50% or 75% of the all villages.

Therefore, authorities concerned may consider covering only 50% or 75% of the target areas. But it should be kept in mind that the outcome of this activity is not only the number of newly detected leprosy case but also the leprosy awareness of the community.

# 6.4 Possible Extensions

The following studies are recommended to fill the gap of information and to strengthen research activity.

- Study for productivity loss due to disability caused by leprosy in Thailand.
- Study the costs and benefits therefore the benefit is in term of cost saving for early case detection of supplier side and consumer side.
- Study cost-effectiveness analysis by using DALY, to measure of the burden of disease.
- The economic evaluation of community based rehabilitation to the care of leprosy patient with disability.