CHAPTER 7

CONCLUSIONS AND RECOMMENDATION

7.1   Conclusions

The research results in Chapter 5 suggested that when Scheme A and Scheme B were implemented in the two counties' rural areas respectively, the total direct costs were different, but the costs of personnel in the two counties occupied the majority (75.84% in County A, 96.17% in Scheme B) of the total direct costs. It would save 57721.14 Yuan if County A implemented Scheme B rather than Scheme A.

The data also suggested that it was not cost-effective to give presumptive treatment to FUO outpatients since few or no positive cases were detected in this group and the cost per positive case detected from FUO was very high.

It seemed that Scheme B may find all or most of the positive cases in the fever outpatients in some counties.

In addition to the results of the micro-level study about the two schemes in two counties, the macro-level study implied that compared to the implementation of Scheme A, when Scheme B was implemented in the basically eliminated malaria areas there would be substantial cost saving due to fewer personnel, materials and drugs involved, from the viewpoint of the institution, but it may miss as many as 8% to 10 % malaria cases from FUO group. Translated to a national scale, the potential savings would be very large but same additional social costs would be incurred.

Considering the changes of SPR, it is possible that when SPR is less than a certain value, the actual operating cost per positive case detected in Scheme A may be higher than that in Scheme B, so Scheme B should be selected. When SPR is higher than that value, the actual operating cost per positive case detected in Scheme B may be higher than that in Scheme A, so Scheme A should theoretically be implemented, and vice versa.

Considering the question of changes in the number of FUO, when the assumptions are given: the personnel is not in full capacity; the costs of microscopists and assistants in anti-malaria teams will not change with the increase of the number of slides examined and SPR in FUO group is very low (0.0003), the cost per slide examined will show a negative trend and the cost per positive case detected will show a

62

positive trend with the increase of the number of FUO. However if the assumptions change, the curve of the cost per positive case detected will change.

With respect to the implications of results of the research, it is suggested that under changing conditions in terms of SPR, each of the alternative of the two schemes may be selected depending on which is more efficient in terms of cost per slide examined and cost per positive case detected with the changes of number of FUO.

7.2   Recommendations

A healthy person may get malaria by bite of infected mosquito, the infection process depends on interaction of human, mosquito and parasite. So it is difficult to establish a transmission model to estimate the possibility of a healthy person or a certain population being infected by infectious mosquitos and the possibility of the mosquito being infected by biting infectious malaria cases. Even though no appropriate established models are available to estimate the possibility of the new cases induced in a certain population by missed malaria cases , it is very desirable to develop a transmission model to assess the possibility in the near future.

In general, for an economic evaluation of a program, the conclusion may be different from the view of providers, consumers or the society. From one's viewpoint, the program, scheme may be very good, but from anothers', it would be opposite. So it will be appreciated if we take the society' viewpoint to carry out economic evaluation.

Due to the limited time and data available, there are shortcomings in the research as mentioned above. More complete studies which take the viewpoint of society and assess all measurable costs to compare the two schemes are ideally needed.

If the time were available, before the decision is made, the following studies would be recommended: (1) an in-depth study of the two schemes under changing conditions including SPR, incidence rate, number of slides examined; (2) a micro analytical study of the two schemes in other counties for confirmation of the results using more accurate measures for costing procedures; (3) a more systematic analysis of the macro level to include modelling of costs for control of focal outbreaks resulting from missed FUO cases.

The result of the research will then be more able to convince the several related parties to decide which scheme should be implemented. In practice, the decision will need to be made in late 1994, so it may not be possible to achieve this ideal.