

## CHAPTER VI

### CONCLUSION AND RECOMMENDATION

#### 6.1 Conclusions

The thesis was aimed at analyzing the costs of programme establishment and operation and its impacts on dental caries as well as constrains in conducting the programme.

From the analysis on the outcome of the two groups of school children, it was found that the DMFT index of the two groups are significantly different. That means the programme is effective, but at a low level. Under this programme the children can save money from dental treatment that they have to pay. Beside, they can avoid the lost time from study and the pain caused by dental caries. Their parents also saved the working time for taking their children to see the dentists. The reasons for the low level of effectiveness are the low quality of the dental service and the inadequate performance of the teachers in giving dental education and supervision for mouthrinsing activity. In addition, there are lack of manpower, and cooperation of related organizations, the increasing sugar consumption of children, especially in the urban area, and dietary habit.

The number of the students having sealed teeth is still low. They are too young to take care of their teeth themselves conscientiously and economic status also had an impact on the outcome of the programme. But the programme was effective to prevent dental caries for the children. potentially the costs can be affordable to both the government and children's parents when they have to pay themselves. However, the question who will pay for running this programme has not been answered in this study.

After analyzing the costs of the programme establishment and operation based on secondary data in two primary schools in the North of Vietnam, the analysis identified that the costs for establishing the School-based Oral Health Programme in Vietnam is not too high. The total costs depend on the recurrent costs, in other word, the total costs of the programme depend on the quantity of the material and activities. They can be acceptable despite the change of price and the change of Vietnam economy. The programme is necessary for children in preventing dental caries especially the children in the rural areas where the children have no chance to access the dental services.

Like total costs average cost is not so high even though current price was used for calculation. Because of the economy transformation, there is a continuing change of the price. Consequently, the total costs and average cost increased year by year. But they still can be acceptable. It was found that the average costs of the programme in a rural area is not so

different than that in urban area. For establishing and operating this programme it is necessary to provide a certain amount of materials and equipment.

The impacts of the programme was evaluate by calculating the cost-effectiveness ratio. This ratio has been decreasing year by year even though the costs go up every year (using two schemes for calculation). These results also demonstrated effectiveness of the programme, but the degree of effectiveness was still low especially in rural area. The cost-effectiveness ratio in rural area is higher than that in urban are. This reflect the fact that before implementing the programme, the DMFT index in the urban area was higher than that in the rural are. When the programme was applied, the difference of DMFT index between intervention and non-intervention group in urban area is higher than that in the rural area. This means that the effectiveness of the programme in the rural area is lower than that in the urban area. The prevalence of students suffering from dental caries and the DMFT index of the group of school children implementing the School based Oral Health Programme continue to increase slightly.

## 6.2 Recommendations

From the analysis of costs of the School based Oral Health Programme establishment and operation and the impacts of the programme on preventing dental caries as well as its constrains, the following recommendations are put forward:

1. The programme should be expanded all over country especially in the rural areas where children have no ability to access the dental services. In order to reduce the running costs of the programme schools located near to each other should be combined in one group.
2. To achieve the effective of the programme, the teachers should be trained to improve their dental health knowledge. They should be encouraged and supported by related government organizations as well as non-government organizations to perform these tasks especially in view the economics status of Vietnam at that time.
3. The quality of dental service should be improved by purchasing new equipment, improving facilities, introducing new technique, encouraging dental nurses to perform their tasks and refreshing their knowledge regularly.
4. Because of the limitation of manpower, particularly in the rural area, the teachers should be trained so that they are able to examine and treat the students and to seal their teeth. Some other countries have successfully applied such programme like Thailand (Songpaisan, 1994), Zimbabwe (Frencken, 1994). At the beginning, the costs for training the teachers may be high but in the long term, this costs may be lower as expertise accumulates.

5. The pit and fissure sealant activities should be increased. This service seem to be costly because the price of sealant is quite high. But the economic implication of this service is the permanent teeth that were sealed can be prevented from dental caries. The students will avoid not only the costs incurred to them for going to the dentist but also the diseases related to dental caries such as heart diseases and kidney diseases.
6. Together School based Oral Health Programme at primary school, the implementation of the strategies for Primary Dental Health Care Programme in the whole country such as water fluoridation, salt fluoridation, tooth paste fluoridation etc., would be of great benefit to school children.

The objectives of this study were to analyze the costs of the School based Oral Health Programme establishment and operation at primary school and explore the impacts of this programme on dental caries. Based on the results achieved from analyzing, the author suggests that this programme should be expanded and improved. But how to expand and to improve this programme economically will require further study.