Chapter 5

Discussion and conclusion

In this study we have focused on the working practices of dental nurses in the three southernmost provinces of Thailand with aim to investigate levels of working practices of dental nurses and to study factors that affect working practices of dental nurses.

Participants comprised 140 dental nurses in general hospitals, community hospitals, primary care units (PCU) and health centers in 33 districts from Pattani, Yala and Narathiwat provinces. The questionnaire included 21 items of working practices and 13 determinants of personal general information. Three steps of analysis were used. Firstly, factor analysis was used to reduce the number of working practice outcome variables. Three factors were classified and labeled as *clinical*, *preventive* and *project activities*. Secondly, univariate analysis was used to investigate association between the determinants and outcome, using two-sample t-test and analysis of variance. Finally, backward elimination multiple linear regression analysis was used for fitting model.

5.1 Discussion

This thesis reports the finding of a survey of working practices of dental nurses in the three southernmost provinces of Thailand. These dental nurses gave highest score on the *clinical activities* (mean= 3.11, SD= 0.79), the second is *preventive activities* (mean= 3.08, SD= 0.76) and they had the lowest score on the *project activities* (mean= 2.37, SD= 1.06).

In general working practice in dental public health can be classified into two groups; they are *clinical* and *preventive activities*. The *project activities* is the third role that given from statistical method. The working style of *project activities* is different from *clinical* and *preventive activities*. However it is benefits in dental public health practices because by the *project activities* can change public awareness and improve oral health status of children.

The dental nurses in the three southernmost provinces of Thailand were doing more practice in the *clinical activities* and they were doing less practice on the *project activities*, agrees with the previous study (Parkpien, 1988, Wiboonponprasert, 1999, Wongkongkathep and Yongwanichakorn, 2003 and Onksririmongkol *et al*, 2008). This result may be due to the ratios of dentist per population in the three southernmost provinces as 1: 18,473 (Health Information System Development office, 2008). The ideal expect ratio of dentist per population do not more than 1:10,000. Because inadequate numbers of dentist who is giving oral treatment for people, so dental nurses must perform oral treatment too. For many years dental nurses in Thailand was understood as a preventive auxiliary for dentist, with emphasis on oral hygiene instruction and doing oral health project.

Dental nurses who graduated before year 2009 were doing more practice in *clinical activities* than dental nurses who graduated in year 2009 or later. This can be partly explained by the old dental nurse curriculum had more focus on *clinical activities* than the new revised curriculum (Prabromaradchachanok Institute, 2007, Prabromaradchachanok Institute, 2012).

Work place was found to be predictors of the *clinical activities* and the *preventive activities*. We found that dental nurses who worked in public hospital were doing more active in both *clinical activities* and *preventive activities* than dental nurses who work in municipality and provincial health office. It was conformable to the role of dental nurse in provincial heath office that their roles are supervision, follow-up and academic support. Having dentist was predictor of the *preventive activities*. Dental nurses who work with dentist were doing more practice in *preventive activities* than dental nurses who worked without dentists. This finding conformable to the role of dentist whose giving oral health treatment in clinical for patient while the role of dental nurse as a preventive auxiliary for dentist, with emphasis on oral hygiene instruction and doing oral health prevention.

Marital status and working experience of dental nurse were found to be predictors of the *project activities*. Marriage dental nurses were doing more practice in *project activities* than single dental nurses. Dental nurses who had working experience more than 7 years were doing more active in *project activities* than dental nurses who had working experience equal or less than 7 years. The *project activities* are needed more skills and motivation. Younger dental nurses who just graduate are not better prepare for *project activities*.

The most common problems of dental nurses' work are their work beyond their role whereas the roles of dental nurse are not clear, their position cannot be promoted by further study, insufficient materials and instruments, lack of dental unit and lack of professional support. This result also agrees with the previous study (Kampira, 1996, Pitakuldilog, 2007, Wijaranaphiti *et al*, 2009).

5.2 Conclusion

This study was conducted to investigate levels of working practices of dental nurses in the three southernmost provinces of Thailand and to study factors that affect working practices of dental nurses in the three southernmost provinces of Thailand. The dental nurses in the three southernmost provinces of Thailand were doing more practice in the *clinical activities* and they were doing less practice on the *preventive* and *project activities*. Year of graduation and work place were predictors of the *clinical activities*. Work place and dentist were predictors of the *preventive activities*. Marital status and working experience were predictors of the *project activities*.

5.3 Study limitation

There are some weaknesses and limitation of this study. The problems in the methodology of mailed self-administered questionnaire (lack of direct communication, misinterpreting the questions). Future study should improve the questionnaire and may use in depth interview, focus group discussion method to get more information.

5.4 Recommendation

The result of the study can serve as guidelines for improving the role of dental nurses as follow

1. From the results of this study, the dental nurses perform in the *clinical activities* more than the *preventive* and *project activities*. So to improve the roles of dental nurses appropriately, the Institute of Prabromaradchachanok should revised their curriculum and add it to their job description legally.

- 2. Training courses about new models, technologies or additional skills should be used for promoted their career.
- 3. For improve access to care and oral health outcomes of children, dental nurses need to work in public school for emphasizes in *prevention* and *project activities*.

5. Suggestion for further research

- 1. This study investigated the working practice on demographic factor only. For future research, there are some variables may concern such as unrest situation in three southernmost provinces of Thailand, other duties and workload of dental nurse.
- 2. The study should investigate the potential of dental nurses' ability on their field work for developing the organization.
- 3. Future research may examine the role of dental nurses by the others, such as dental supervisor and the patients.