

CHAPTER 4

DISCUSSION AND CONCLUSION

4.1 Discussion

Osteoporosis disease occurs to everyone when they were getting old. The severity of symptoms depend on the bone mass that it will be peak around 20-25 years of age. The fact is this disease can not be cure. However it can prevented when they are younger by taking adequate dietary calcium intake, exercise and avoiding risk factors. Therefore, the best time to prevent is around 20-25 years but this duration age, in general, they are not interested to have a good nutrition and exercise because the disease is perceived too far to happen to them.

In this study, the result of effect of osteoporosis education program showed that young student in the experimental group had gained more knowledge, susceptibility of osteoporosis and perceived seriousness of osteoporosis than the control group. Even though, the mean scores of benefit and barrier was not different but the total perception (susceptibility, seriousness, benefit and barrier) was shown mean scores higher and statistically significant than the control group.

The result on the osteoporosis prevention behavior showed that mean scores of exercise and calcium intake behavior was higher than the control group but risk factors avoidance behavior was not shown difference between experimental and control group. The reason to explain this result is the Thai

culture, in general, the younger student are not drinking alcohol and smoking cigarette and these behavior are not suitable to behave in Thai social. It is not accepted by the Thai social. Therefore, risk factors avoidance behavior was not difference between control and experimental groups. However, the student in the experimental was shown increase significantly than the control group when considering in total behavior.

The result from ANCOVA showed that previous behavior and groups were predictors of behavior in exercise, calcium intake, risk factor avoidance efficiency. While the knowledge and perception at baseline and immediately follow-up were not predictors on their behavior. The reason may explain for this result that the study duration is short and the number of the participants are less.

However, from this study young students who participated in osteoporosis education program gained more knowledge, perceived susceptibility of osteoporosis, perceived severity of osteoporosis, perceived benefit and barrier of osteoporosis prevention behaviors than those who did not participate in the program. In addition, increasing participants' knowledge, susceptibility, seriousness, benefit and barrier in osteoporosis in the experimental group could subsequently improved dietary intake of calcium and weight bearing exercise and limiting caffeine intake. In contrast, subjects in the control group had no change in osteoporosis prevention behaviors.

These findings were similar to the study of results of Carol A. Sedlac (1998) who found young women who participated in an osteoporosis prevention program based on the Health Belief Model had significantly higher knowledge and health belief scores after receiving the intervention than their pretest scores while subjects in the control group had no change in score. Thus, using the Health Belief Model to perceive susceptibility in osteoporosis, perceive severity of osteoporosis, perceive benefit and barrier of osteoporosis prevention was effective in increasing of osteoporosis prevention behavior in the young women.

The results also in consistent with a previous study conducted by Nonglux Prasitphol (1999) who studied the effects of the application of Health Belief Model on osteoporosis prevention behavior among premenopausal women in Uthong distric, Suphanburi province. Her results showed that the application of health Belief Model could cause a significantly increase in perceived susceptibility to osteoporosis, perceived severity of osteoporosis, perceive benefit and barrier of osteoporosis.

Conclusion

The osteoporosis education program could lead young students who participated in the osteoporosis program to have not only significantly increase in knowledge and perception of their health belief of osteoporosis disease but also an increase in dietary intake of calcium and weight bearing exercise and a reduction of caffeine intake. This study could also help raise

awareness in osteoporosis, a common disease which has become a major public health problem, especially in Thailand where the number of elderly population have increased.