#### **CHAPTER 5**

#### CONCLUSION AND RECOMENDATIONS

# **Conclusion of the study**

This study was quasi-experimental research, with a two groups pretest-posttest design. It aimed to identify the effects of the Yoga program on stress and blood pressure among persons with hypertension. Purposive sampling was used to recruit subjects from Songkhla Province. The number of subjects were 54 divided equally into experimental and control groups using the minimized randomization version 2.01 of Zeller (1997) run on Microsoft access 2000 and were sufficient to answer the hypothesis. As the subjects were matched for age, gender, level of education, smoking, alcohol use, and exercise, the demographic data of the groups were similar. Their ages ranged from 37-80 years old and most were females; 63 % and 66.7 % in the experimental and control groups respectively. The majority were married, attained bachelor degree or higher and worked as government officials with adequate income in both groups. Most were recently diagnosed with hypertension and most of them had extreme to mild stress level. The experimental group practiced the Yoga program 63 minutes/session three times a week for eight consecutive weeks under the guidance of the researcher or research assistance using the cassette tape and the Yoga manual. The practice was at the elderly center of Songkhla Hospital on Monday, Wednesday and Friday evening and at Bangdan Preliminary School on Tuesday, Thursday and Saturday evening before dinner. The

control group received only routine care regarding knowledge about hypertension and self-practice from the hospital's health personnel.

The principal conclusions are that:

- 1. Persons with hypertension in the experimental and control groups had a mean score of stress before the experiment of 93.6 and 105.1 respectively. There was no significant difference between experimental and control group (p > .05).
- 2. After 8 weeks of the experiment, the persons with hypertension in the experimental group had a significantly lower mean score of stress than before the experiment and were lower significantly than the control group (p < .01), which meets the hypothesis.
- 3. After 8 weeks of the experiment, the persons with hypertension in the experimental group had a significantly lower mean score of systolic and diastolic blood pressure than before the experiment and in comparison with the control group (p < .01), which meets the hypothesis.
- 4. After 8 weeks of the experiment, the persons with hypertension in the experimental group had a significantly lower mean score of heart rate and respiratory rate than before the experiment and in comparison the control group (p < .01), which meets the hypothesis.
- 5. After 8 weeks of the experiment, the persons with hypertension in the experimental group had significantly a mean body mass index lower than before the experiment (p < .05) but there was no significant difference in mean score of body mass index when compared with the control group (p > .05).

#### Recommendations

### **Implications for nursing practice**

The study found that the Yoga program had achieved a reduction in stress and blood pressure among persons with hypertension. Yoga can be curable and preventative in hypertension, which could encourage hypertensive patients to continue practice and be role models in their self-care. The benefits of yoga practice in achieving a reduction in stress, blood pressure, heart rate, respiratory rate, and body mass index suggest that it could be useful in every setting of the health center. Nurses and health care personnel could practice yoga and then be able to give advice on yoga practice to people with chronic diseases, especially those that have an element of stress. Additionally, nurses and health care personnel can be encouraged to manage stress and blood pressure in persons with severe hypertension using this alternative for treatment properly combination with usual treatment. As yoga is a noninvasive therapeutic technique, it could be promoted for nurses to use as an independent nursing intervention to promote health in well people without obvious signs of disease to prevent stress and diseases that can be the outcome of stress or the cause of stress.

# The implications for future research

The study demonstrated that the Yoga program helps to reduce stress and blood pressure in person with hypertension. It is evident that the program is effective for person with mild and moderate hypertension. Further studies are indicated that focus on more severe hypertensive cases using a combination of medicine and yoga or other types of non-pharmacological therapies, particularly those based on the individual's preference, to reduce drug use and control the blood pressure more appropriately. It would be

appropriate to also study the use of yoga in other populations who have health problems related to stress.

# Limitations of the study

- 1. The BP, HR, RR, and BW in both groups (experiment and control) should be measured at approximately the same time. In this study most of the measurements in both groups were taken in the afternoon from 2-4 PM. However, some of the measurements in the control group were done in the morning from 9.00- 11.00 AM due to the time availability of the subjects.
- 2. There were time constraints for the research study; hence the researcher could only monitor the practice and changes for the 8 weeks of the program. suggests that there may be more benefit of a longer period of practise
- 3. Group support during practising yoga could not be avoided and this may have an effect that might be possibly effect stress level that may be another benefit of yoga practice as people get some support from people in the same situation.
- 4. The BP, HR, RR, and BW in both groups (experiment and control) should be measured at approximately the same time. In this study most of the samples in both groups were measured in the afternoon during 2-4 PM. However, some of samples in the control group were measured in the morning during 9.00- 11.00 AM due to the time availability of the samples.