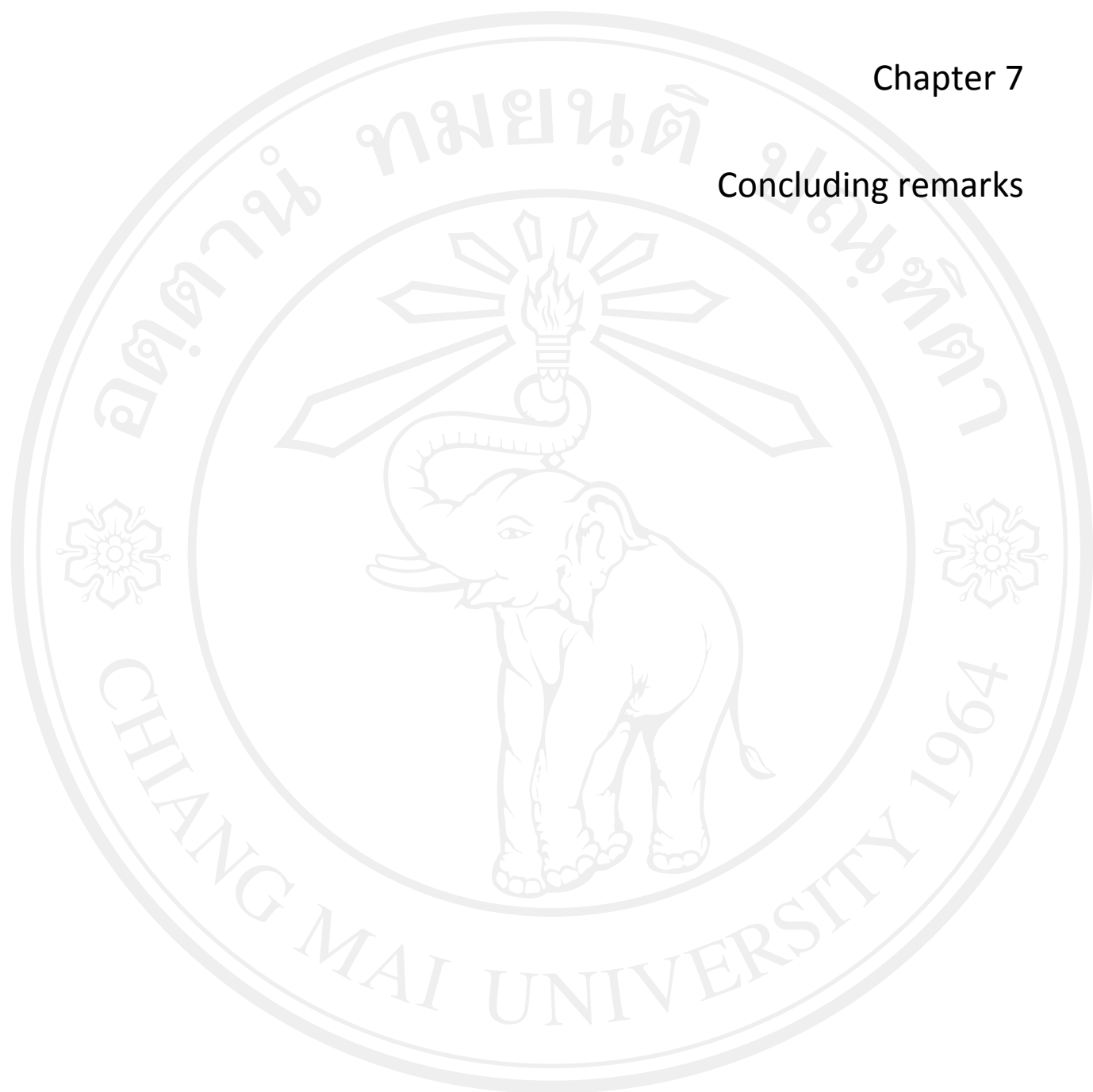


Chapter 7

Concluding remarks



ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

Copyright© by Chiang Mai University  
All rights reserved

Menopause described as the completely to stop the duration of menstrual that happens naturally or is increase the risk by chemotherapy, surgery, or radiotherapy.<sup>(1, 2)</sup> Nearly 85% of climacteric women reported at least 1 menopausal problem, for example hot flushes, depressive mood, or problems with asleep.<sup>(3)</sup> Nearly 10 percent of women, undergoing perimenopausal or menopausal changes, visit health care providers to seek medical counseling. Estrogen therapy is an effective, well-established treatment.<sup>(4)</sup> Early onset of climacteric and postmenopausal period are related to higher blood pressure level.<sup>(5-7)</sup> Climacteric will increase the chance of high blood pressure by 2-fold, even once adjusting for factors like age and body mass index (BMI).<sup>(8, 9)</sup> Treatment modalities for menopausal symptoms and hypertension in menopause are still debatable. After the publication of the Women's Health Initiative study, menopausal problem management has become additional complicated as a result of the risks related to the treatment of hormone.<sup>(10)</sup> Actually, there has been a huge decline within the prescription and use of the treatment of hormone.<sup>(10)</sup> Relaxation is an alternative method for treating vasomotor symptoms but its effectiveness is still questionable. The problem of low perceived risk in asymptomatic conditions, like hypertension, leads to complacency and noncompliance. Although compliance with antihypertensive therapy was reported to be as high as 81.6% among patients in clinical trials, it was only 50.6% in the general clinic patients. Behavior modification techniques may provide the lacking element to enhance compliance and increase awareness of the risks associated with inadequate treatment.<sup>(11-16)</sup>

This thesis highlights the effect of relaxation method in treating hot flushes, nights sweating, and sleeps disturbance in women with peri- and postmenopausal status. In addition, it draws special attention to the use of MR (modified relaxation) method to control mild hypertension in Thai postmenopausal women, compared with a control group who receive only health education.

Systematic review of the effectiveness of relaxation techniques versus acupuncture in treating menopausal symptoms found that existing studies provide insufficient evidence to determine the effectiveness of relaxation techniques as a treatment for menopausal vasomotor symptoms, or whether the treatment is more effective than acupuncture. There was a small non-significant effect in favor of relaxation over acupuncture, but the meta-analysis was based on only two studies with small sample sizes. One large trial to date, with unclear methodological quality, found no significant difference between relaxation techniques and acupuncture. However, the study randomized participants into 4 treatment groups, and it was not powered to detect a difference in treatment effect between relaxation techniques and acupuncture. More high quality RCTs with adequate sample sizes are required before any definite conclusion can be made. As a consequence, there were limited data to evaluate the effectiveness of relaxation techniques on vasomotor symptoms. No data were reported on the outcomes of night sweats and sleep disturbances. While several trials included quality of life (QOL) as an outcome, they typically used invalid measures. The percentage of dropouts in the relaxation group was higher than that in the acupuncture group, but the reasons for this loss to follow-up was not well understood. It should be noted that relaxation techniques require long and continuous practice to achieve

the treatment effect and subjects' compliance can be a problem. The adverse events and tolerability of relaxation interventions were not reported. It is important to know the benefits and risks of relaxation intervention before it can be recommended as a treatment option for menopausal symptoms. In conclusion, this meta-analysis raised some concern as the methodological quality of included trials was variable, and all of them had small sample sizes. More good-quality RCTs of an adequate sample size that compare relaxation intervention with placebo or other types of interventions are urgently needed. Studies should evaluate not only the effect of the intervention on the frequency and intensity of vasomotor symptoms, but also the impact of treatment on women's daily life, and compliance with the treatment.

In the study comparing conventional AR with its modified version (MR) in the treatment of perimenopausal and postmenopausal symptoms, we found that the total severity scores in both groups decreased after 12 weeks, but there was no significant difference between the two groups. The severity score for hot flushes in the MR group decreased significantly more than that in the AR group. The severity scores for nights sweating and sleep disturbances decreased in both groups. The frequency of hot flushes, nights sweating, and sleeps disturbances were also decreased in both groups. Since MR and AR methods had comparable success in reducing menopausal symptoms, MR method could complement or be used as another choice to AR. Although the mean reduction in the frequency and severity of menopausal symptoms appears to be small, this represents a real benefit for some women. We suggest that both MR and AR should be available for women to make their personal choice. Further confirmatory researches, with a larger sample size, should be done to further evaluate the role of relaxation techniques in the management of menopausal symptoms.

In our RCT in postmenopausal women with mild hypertension, comparing Modified Relaxation (MR) technique with a control group who received only health education, we found that the mean decrease in systolic blood pressure (SBP) in the MR group was significantly more than that in the controls at week 16 after treatment. However, the reduction of DBP in both groups was not statistically different. Despite some limitations in the study, the results showed that a brief (60-minute) training program of relaxation techniques is beneficial in lowering the blood pressure in this population with mild hypertension. A mean reduction of 2.1 mmHg SBP in this study was in agreement with our comprehensive review of the literature, which showed a mean reduction of 2 mmHg SBP. Although the reduction in SBP is small in magnitude, it is enough to significantly reduce the risks for stroke and heart failure. MR technique is not a suitable choice for patients with moderate or severe hypertension, as this group of patients' needs more than 10 mmHg reduction of SBP. It would be of interest to examine whether this technique would add any benefit to routine medical treatment of moderate to severe HT. MR Technique might help lowering the doses and/or side effects of the medications. The findings of the current trial also require confirmation from future controlled trials with a larger sample size and a long-term follow-up in other ethnic groups to increase its generalization to other populations.

## References

1. WHO Scientific Group on Research on the Menopause in the 1990s. WHO Technical Report Series Geneva, Switzerland: WHO; 1996.
2. Soules MR, Sherman S, Parrott E, Rebar R, Santoro N, Utian W, Woods N. Executive summary: stages of reproductive aging workshop (STRAW) Park City, Utah, July 2001. *Menopause* 2001;8:402-7.
3. McKinlay MS, Brambilla JD, Posner J. The normal menopause transition. *Maturitas* 1992;14(2):103-15.
4. Hickey M, Davis SR, Sturdee DW. Treatment of menopausal symptoms: what shall we do now? *The Lancet* 2005;366(9483):409-21.
5. Izumi Y, Matsumoto K, Ozawa Y, Kasamaki Y, Shinndo A, Ohta M, et al. Effect of age at menopause on blood pressure in postmenopausal women. *Am J Hypertens* 2007;20:1045-50.
6. Mercurio G, Zoncu S, Saiu F, Mascia M, Melis GB, Rosano GM. Menopause induced by oophorectomy reveals a role of ovarian estrogen on the maintenance of pressure homeostasis. *Maturitas* 2004;47:131-8.
7. Barton M, Meyer MR, Haas E. Hormone replacement therapy and atherosclerosis in postmenopausal women: does aging limit therapeutic benefits? *Arterioscler Thromb Vasc Biol* 2007;27:1669-72.
8. Staessen J, Bulpitt CJ, Fagard R, Lijnen P, Amery A. The influence of menopause on blood pressure. *J Hum Hypertens* 1989;3:427-33.
9. Amigoni S, Morelli P, Parazzini F, Chatenoud L. Determinants of elevated blood pressure in women around menopause: results from a cross-sectional study in Italy. *Maturitas* 2000;34:25-32.
10. North American Menopause Society. Treatment of menopause-associated vasomotor symptoms: position statement of The North American Menopause Society. *Menopause* 2004;11:11-33.
11. Ong KL, Cheung BM, Man YB, Lau CP, Lam KS. Prevalence, awareness, treatment, and control of hypertension among United States adults 1999-2004. *Hypertension* 2007;49:69-75.
12. Wassertheil-Smoller S, Anderson G, Psaty BM, Black HR, Manson J, Wong N, et al. Hypertension and its treatment in postmenopausal women: baseline data from the Women's Health Initiative. *Hypertension* 2000;36:780-9.
13. Bramlage P, Pittrow D, Wittchen HU, Kirch W, Boehler S, Lehnert D, et al. Hypertension in overweight and obese primary care patients is highly prevalent and poorly controlled. *Am J Hypertens* 2004;17:904-10.
14. Ma J, Stafford RS. Screening, treatment, and control of hypertension in US private physician offices, 2003-2004. *Hypertension* 2008;51:1275-81.
15. Chen CJ, Tseng WP, Pan BJ, et al. Six-community hypertension intervention trial in Taiwan: epidemiological characteristics and treatment compliance. *J Nat Public Health Assoc (ROC)* 1988;8(4):255-69.
16. U.S. Department of Health and Human Services. The 1988 report of the Joint National Committee on Detection, Evaluation and Treatment of High Blood Pressure. *Arch Intern Med* 1988;148(5):1023-38.