#### **CHAPTER 5**

### CONCLUSION AND RECOMMENDATIONS

This chapter is presented in three parts including the conclusion of the study, implications of findings, and recommendations for further research.

# **Conclusion of the Study**

The purpose of this cross-sectional predictive correlational study was to test a causal model of adherence to therapeutic regimens among Thai persons with hypertension. The study variables included knowledge of hypertension, social support, health belief, provider-patient communication, perceived self-efficacy, and adherence to therapeutic regimens. The conceptual framework of this study was based on empirical data from the literature review focusing on modifiable variables which can be intervened by nursing intervention. Data collection was conducted from May to July 2012. A total 321 of Thai persons with hypertension, who were diagnosed with essential hypertension for at least 6 months, took at least one antihypertensive drug, and aged between 35-59 years were randomly selected using multistage random sampling from four hypertension clinics at four community hospitals in Lampang Province.

Seven instruments were used to collect the data including 1) the Demographic Data Form, 2) the Knowledge of Hypertension Scale, 3) the Provider-patient Communication Scale, 4) the Hypertensive Social Support Scale, 5) the

Hypertensive Health Belief Scale, 6) the Hypertensive Self-efficacy Scale, and 7) the Hypertensive Adherence to Therapeutic Regimens Scale. The S-CVI of all instruments was examined by five experts and their values varied from 0.84 to 1.00. The internal consistency coefficients of all instruments varied from 0.77 to 0.92. Descriptive statistics were used to describe characteristics of the participants and of the six variables in the study. Pearson's product moment correlation was used to analyze the relationship between five independent variables and adherence to therapeutic regimens. Path analysis by structural equation model using LISREL 8.7S program was used to test the hypothesized model of adherence to therapeutic regimens among Thai persons with hypertension.

The findings of this study are summarized into two points as follow:

- 1. With regards to the relationship among independent variables and adherence to therapeutic regimens, the results showed that perceived self-efficacy had a high positive relationship with adherence to therapeutic regimens (r = .66, p < .01). Knowledge of hypertension had a moderate positive association with adherence to therapeutic regimens (r = .30, p < .01). Social support had a moderate positive relationship with adherence to therapeutic regimens (r = .39, p < .01). Health belief had a moderate positive relationship with adherence to therapeutic regimens (r = .41, p < .01). Lastly, provider-patient communication had a low positive relationship with adherence to therapeutic regimens (r = .23, p < .01).
- 2. A casual model of adherence to the therapeutic regimens showed the best fit with the data. The fit indices measured were acceptable values;  $\chi^2 = 2.19$ , df = 5, p = .82, RMSEA = 0.00, GFI = 1.00, AGFI = .99, CFI = 1.00, RMR = 0.014, SRMR = 0.014 and the largest standardized residual = 1.38. All parameters in the model

yielded a significant p-value. This model could explain 49% of total variance in adherence to therapeutic regimens and 38% in perceived self-efficacy. Adherence to therapeutic regimens was directly predicted by social support ( $\beta$  = .13, p < .01), provider-patient communication ( $\beta$  = .42, p < .01) and perceived self-efficacy ( $\beta$  = .55, p < .01). Perceived self-efficacy was directly predicted by health belief ( $\beta$  = .42, p < .01), and social support ( $\beta$  = .38, p < .01). Knowledge of hypertension had neither a significant direct or indirect effect on adherence to therapeutic regimens but it was directly predicted by provider-patient communication ( $\beta$  = .60, p < .01). Also perceived self-efficacy was the most powerful predictor of adherence to therapeutic regimens and was a mediator variable in this model.

# **Implications of the Study**

This study provides evidence to better understand adherence to therapeutic regimens and affecting factors for persons with hypertension. The model of adherence to therapeutic regimens provides essential nursing knowledge for applying in the area of nursing as follows:

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# **Implication for Nursing Profession (Nursing Knowledge)**

This study expands nursing knowledge regarding factors affecting adherence to therapeutic regimens among persons with hypertension which indicates that perceived self-efficacy, social support and provider-patient communication directly influence on adherence to therapeutic regimens. Health belief indirectly influences adherence to therapeutic regimens via perceived self-efficacy. Provider-patient communication is a predictor of knowledge of hypertension among persons with hypertension. Thus, to improve adherence to therapeutic regimens, nurses should be concerned with and promote these factors.

# **Implication for Nursing Research**

This study provides primary nursing knowledge for understanding adherence to therapeutic regimens and influencing factors for persons with hypertension. Additionally, sufficient data should be generated to develop and test nursing interventions to promote adherence to regimens for persons with hypertension. Interventions, such as integrating of social support, perceived self-efficacy, health belief and provider-patient communication should be designed and tested for the effectiveness of the intervention.

# **Implication for Nursing Administration**

This study should provide basic information for community hospital administrators to determine health care policy and strategy plans to improve the quality of health care services to promote adherence to regimens among Thai persons with hypertension.

# **Implication for Nursing Practice**

This study indicated that perceived self-efficacy, social support, health belief and provider-patient communication were the predictors of adherence to therapeutic regimens among persons with hypertension whereas knowledge of hypertension was predicted by provider-patient communication. It is important for nursing as it is a guideline to assess these factors including social support, provider-patient communication, health belief and perceived self-efficacy because knowing these factors is the basic information required by nurses to understand the patients' problems, barriers and also useful resources to perform the recommended behaviors for controlling blood pressure. Nurses should then tailor nursing intervention based on individuals' problems and needs.

# **Implication for Nursing Education**

This study provides a model for explaining the significant factors predicting adherence to therapeutic regimens among persons with hypertension which is able to guide nursing instructors in teaching about what factors are of concern for

persons with hypertension in order to improve adherent behaviors for controlling blood pressure to achieve the optimal level. The results should expand knowledge for teaching nursing students in order to promote adherence to therapeutic regimens in their patients.

### **Recommendations for Further Study**

The recommendations for further study based on the study findings are presented as follow:

- 1. A further study should be replicated and compared in various subgroups of persons with hypertension such as a comparison between groups of persons with controlled hypertension and with uncontrolled hypertension or between females and males in order to understand how different or similar factors can contribute to adherence to therapeutic regimens.
- 2. A further study should examine each effect of the four subscales of health belief (perceived susceptibility to induce complications, perceived severity of complications, perceived benefits of performing disease control behaviors and perceived barriers of performing disease control behaviors for hypertensive patients) on adherence to therapeutic regimens in order to determine which subscales of health belief have direct and/or indirect effect on adherence to therapeutic regimens and which other predicting variables have direct and/or indirect effect on those subscales.