



CHAPTER III

RESEARCH METHODOLOGY

3.1 Study design

The study design was an analytical cross-sectional study concerning knowledge, attitudes, and practices of preventive behaviors regarding stress management in essential-mild hypertension OPD patients at BMA Health Center No.48.

3.2 Target population

The population in this study was essential-mild hypertension OPD patients at BMA Health Center No.48.

3.3 Study area

The study area was at BMA Health Center No. 48.

3.4 Study period

From February 7- March 12, 2008.

3.5 Sample size

In line with ready-made table by Sirichai Kanjanawasri (2002) and Healey (1995) for the confidence level at 90% while allowing for error size of not more than + or – 5%, and if the size of the population is infinity, the required sample size was

size was below 300. For the purpose of extra questionnaires back-up reason, a total sample size was 300 (Raosoft, 2004).

3.6 Sampling techniques

This study employed non-probability in quota sampling method. This means that all OPD patients within inclusion criteria at Hypertension Clinic of BMA Health Center No. 48 took part in the study from Monday to Friday in the morning during the period of data collection until the number reached 300 sample sizes.

Inclusion criteria: Essential-mild hypertension OPD patients visiting Hypertension Clinic at BMA Health Centers No. 48. The patients were willing to be respondents for the questionnaire used in this study. They need to be 35 years and older, both male and female. They may or may not have other diseases ie. diabetes, obesity, etc.

Exclusion criteria: Those mild hypertension patients who were not in line with the inclusion criteria and/or who do so but were not willing to take part in the study.

All patients with inclusion criteria above who visited the Hypertension Clinic at BMA Health Center No. 48 between the periods of data collection were requested to fill-in or answer the questionnaire on voluntary basis.

3.7 Variables

Independent variables

1. Demographic and socioeconomic background
2. Knowledge about preventive behaviors regarding stress management
3. Attitudes about preventive behaviors regarding stress management

Dependent variable

Practice of preventive behaviors regarding stress management

3.8 Questionnaire development and data collection

The questionnaire for the survey was constructed from various books and research papers applicable question items. After getting content validity from the Thesis Committee in end January, 2008, the process of reliability test was done for a number of 40 pre-test samples who were the OPD patients for Hypertension Clinic at BMA Health Center No. 43 and 45, which are located in the Navamin and Ladkrabang areas (northern side of Bangkok) in order to avoid any contamination effects. Prior to the data collection of the pre-test, the researcher requested the College of Public Health Sciences, Chulalongkorn University, to write a letter to Bangkok Metropolitan Administration Headquarters, asking for the permission to approach BMA Health Center No. 43 and 45 for pre-test of the questionnaire data collection. Once approved, the researcher and the two other Thai research assistants collected the data during early February, 2008 for about one week time. Upon analysis, the Cronbach's Alpha value was used and it was found that the value was 0.547 for knowledge part, 0.455 for attitude part, and 0.691 for practice part. The overall Cronbach's Alpha value was 0.706. The result of the pre-test was satisfactorily confirmed by the Thesis Committee to be used in the field test without any deletion of the items designed.

Content of the questionnaire: the questionnaire was divided into 4 parts:

- 1. Demographic and socioeconomic background:** This section included gender, age, nationality, marital status, educational level, occupation, number of

family members, monthly household income, monthly household expenditure, family member (s) with hypertension, cause (s) of respondent's stress, respondent's knowledge on how-to relieve his/her stress, hours of sleep, height and weight (BMI), and measured blood pressure for the two most recent times, of essential-mild hypertension patients.

2. Knowledge about preventive behaviors regarding stress management:

There were a total of 9 questions. Three of them were knowledge items on hypertension in general and the rest were knowledge of preventive behaviors regarding stress management in essential-mild hypertension patients in particular.

Scoring criteria

Right 1

Wrong 0

Do not know 0

For reverse answer, the score was worked backward.

The total score ranged 1-9 points.

Low level : a score of 1-5

Moderate level : a score of 6-7

High level : a score of 8-9

3. Attitudes about preventive behaviors regarding stress management:

There were a total of 10 questions. Four of them were attitudes items on hypertension in general and the rest were attitudes of preventive behaviors regarding stress management in essential-mild hypertension patients in particular.

Scoring criteria

Agree 3

Not certain 2

Disagree 1

For reverse answer, the score was worked backward.

The total score ranged 16-30 points.

Low level : a score of 16-23

Moderate level : a score of 24-27

High level : a score of 28-30

4. Practices about preventive behaviors regarding stress management:

There were a total of 13 questions. All of them were practice of preventive behaviors regarding stress management items on essential-mild hypertension.

Scoring criteria

Always/Often 3

Occasionally 2

Rarely/Never 1

There was no reverse answer for this section.

The total score ranged 21-39 points.

Low level : a score of 21-27

Moderate level : a score of 28-32

High level : a score of 33-39

3.9 Data collection procedures for field test:

1. The researcher again requested the College of Public Health Sciences, Chulalongkorn University, to write a letter to Bangkok Metropolitan Administration Headquarters, asking for the permission to approach BMA Health Center No. 48 for full data collection.

2. Once approved, the researcher and the two other Thai research assistants paid a visit to the Director of the Center, asking for the date and time suitable for data collection. The research team was told that Hypertension Clinic is available every morning of working day of the week.

3. Before data collection, the researcher contacted the Nurse Head in order to introduce himself and the team and to point out the objectives of this time data collection.

4. Each potential sample (according to the inclusion criteria) would read the consent form and sign their names before replying the self-administered questionnaire.

5. Only when necessary, such as, the respondents had eyesight problem when reading, the research team would interview them according to the questionnaire items.

6. The data were collected during February 7 to March 12, 2008, for a number of 300 sets.

3.10 Data analysis

The data was analyzed by Statistical Package for the Social Science (SPSS) Program for two steps:

1. **Descriptive analysis:** frequency and percentage for demographic and socioeconomic background; and frequency, percentage, mean, and standard deviation, for an explanation on level of knowledge, attitudes, and practices of preventive behaviors regarding stress management of respondents.

2. **Inferential statistics** was done with the use of Pearson Coefficient Correlation, Chi-Square, and Spearman Test, to find out the association among demographic and socioeconomic background, level of knowledge, of attitudes, with level of practices of preventive behaviors regarding stress management of respondents.

3.11 Limitations of the study

1. Since this study was conducted in population of BMA Health Center No. 48 only, thus, it can not be a representative of all BMA population in Bangkok and Metropolitan areas

2. Due to time constraints with the Thai research assistants, only 300 sample-data were collected at this time of study.