



CHAPTER I

INTRODUCTION

1.1 Background and Significance of the Problem

Cardiovascular diseases (CVD) including stroke constitute the major cause of death and disability. Every year, worldwide more than 15 million deaths occur due to CVD and about 9 million deaths are accounted for in developing countries. High blood pressure (HBP) or hypertension is the primary risk factor for CVD (Chockalingam & Balaguer-Vintro, 1999).

Hypertension is a silent disease. Numerous hypertensive cases are not detected due to a simple lack of routine check-up (WHO MONICA Project, 1989).

HBP has been identified as a major risk factor for stroke, congestive heart failure, renal disease and myocardial infarction. According to World Health Organization the number of people with HBP levels, worldwide, is estimated to be about 600 million and the annual mortality attributable to hypertension is estimated to be about 7.14 million (Ezzati et al., 2002).

Although hypertension may be secondary, most (>95%) hypertension is 'essential' or primary. Primary hypertension, which affects about 20% of adults, is partly genetically determined; the estimates on genetic variance range from 20 to 50% (Perusse et al., 1991).

Hypertension is a major risk factor for cardiovascular disease, and the latter is the leading cause of morbidity and mortality worldwide. In developed countries,

hypertension ranks as the top contributing factor for mortality and third in causing disability-adjusted life years. Hypertension is a polygenic and complex disease with rising prevalence (Ezzati et al., 2002).

More than 25% of the adult population is affected by hypertension, and two thirds of those individuals reside in developing countries. Europe shows an even higher prevalence of hypertension than North America. With the present trends, the prevalence of hypertension is predicted to increase to 30% or 1.5 billion people, on the globe in the next 20 years (Wolf-Maier et al., 2003; Kearney et al., 2005).

Hypertension has become a significant problem in many developing countries experiencing epidemiological transition from communicable to noncommunicable chronic diseases (WHO, 1993). The emergence of hypertension and other cardiovascular diseases as a public health problem in these countries is strongly related to the aging of the populations, urbanization, and socioeconomic changes favoring sedentary habits, obesity, alcohol consumption, and salt intake, among others. It is estimated that one quarter of all the adults in the world have hypertension (Kearney et al., 2005).

Risk factors for hypertension include family history, race, stress, obesity, a diet high in saturated fats or sodium, tobacco use, sedentary lifestyle, and aging (Cutler, 1993; Stevens et al., 1993). In many of these studies BP was apparently reduced by stress management, and one study showed that stress management might reduce cardiovascular morbidity (Patel et al., 1985; Johnston, 1991).

Hypertension is a chronic disease that is an important public health problem in Thailand. It cannot be cured and the patients with the disease cannot return to a normal way of life. However, it is necessary for them to receive continuing care.

More serious complications may develop and long-term nature of the disease can only heighten severity, thus increasing the need for long term planning. The cost of managing the disease is very high. Cost of laboratory diagnosis, expensive drugs and hospitalization are direct costs. In addition, there are many indirect costs, such as less monetary earning, disability, and less productivity. These adverse events often lead to expensive hospitalization, surgical procedures, and treatment involving high cost technologies. However, the cost of managing hypertension is overall than the sum of direct and indirect costs that may be avoided by reducing hypertension associated heart disease, stroke, and renal failure (Hanujareonkul et al., 1999). Therefore, one of the best ways to cope with the situation is to change one's lifestyle to yield good benefits for one's own health status.

One of the major health service providers in Bangkok and Metropolitan area are those 68 Bangkok Metropolitan Administration Health Centers (and 82 of their sub-branches) dotting around the city. Bangkok Metropolitan Administration Health Centers are under the supervision of Bangkok Metropolitan Administration. All these Centers have been categorized into 3 groups, first is the inner city group, followed with central city group, and lastly, the outer ring group. In order to study about preventive behaviors regarding stress management in essential-mild hypertension patients in Thai population, the researcher has chosen one of the outer ring Bangkok Metropolitan Administration Health Centers, namely, Bangkok Metropolitan Administration Health Center No. 48 (or BMA Health Center No. 48 for short) as the study site. BMA 48 is located in Nongkham (western of Bangkok) and is in adjacent to Nakornprathom province. It consists of 3 sub-branches – Nakvatcharaoutid, Nongkham, and Pitiwan.

1.2 Research questions

1. What are the demographic and socioeconomic background and levels of knowledge, attitudes and practices of preventive behaviors regarding stress management in the essential-mild hypertension OPD patients at Bangkok Metropolitan Administration Health Center No. 48 (BMA Health Center No. 48)?
2. Do the demographic and socioeconomic background, level of knowledge, and level of attitudes, associate with the level of practices of preventive behaviors regarding stress management in the essential-mild hypertension OPD patients at BMA Health Center No. 48?
3. How do the essential-mild hypertension OPD patients at BMA Health Center No. 48 perform their preventive behaviors regarding stress management?

1.3 Objectives of study

1.3.1 General Objective

To study the level of knowledge, attitudes and practices of preventive behaviors regarding stress management in essential-mild hypertension OPD patients at BMA Health Center No. 48 and the relationship among them.

1.3.2 Specific Objectives

1. To study the distribution of essential-mild hypertension OPD patients in respect to their demographic and socioeconomic background.
2. To study the level of knowledge, attitudes, and practices of preventive behaviors regarding stress management in the essential-mild hypertension OPD patients at BMA Health Center No. 48.

3. To determine the association among demographic and socioeconomic background, knowledge, and attitudes with practices of preventive behaviors regarding stress management in the essential-mild hypertension OPD patients at BMA Health Center No. 48.

1.4 Operational terms:

1. Essential-mild hypertension means hypertension at the low level with systolic and diastolic level by Joint National Committee (JNC.V) definition as follows:

Level	Systolic (mmHg)	Diastolic (mmHg)
Mild hypertension	140-159	and/or 90-99

2. BMA Health Center No. 48 means one (from 68 branches) of BMA Health Center located in the suburb of Bangkok in Nong Khaem area. It covers three branches, namely, Nakvatcharaoutid, Nong Khaem, and Pitiwan.
3. Essential-mild hypertension OPD patients mean those patients visiting Hypertension Clinic at BMA Health Center No. 48 at the data-collection time.
4. Demographic and socioeconomic background cover patients' gender, age, nationality, marital status, educational level, occupation, 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, weight, and blood pressure measurement for the two most recent times.
5. Knowledge, attitudes and practices about preventive behaviors regarding stress management in essential-mild hypertension patients mean patients' knowledge,

attitudes and practices on hypertension in general and in stress management in particular.

1.5 Conceptual framework

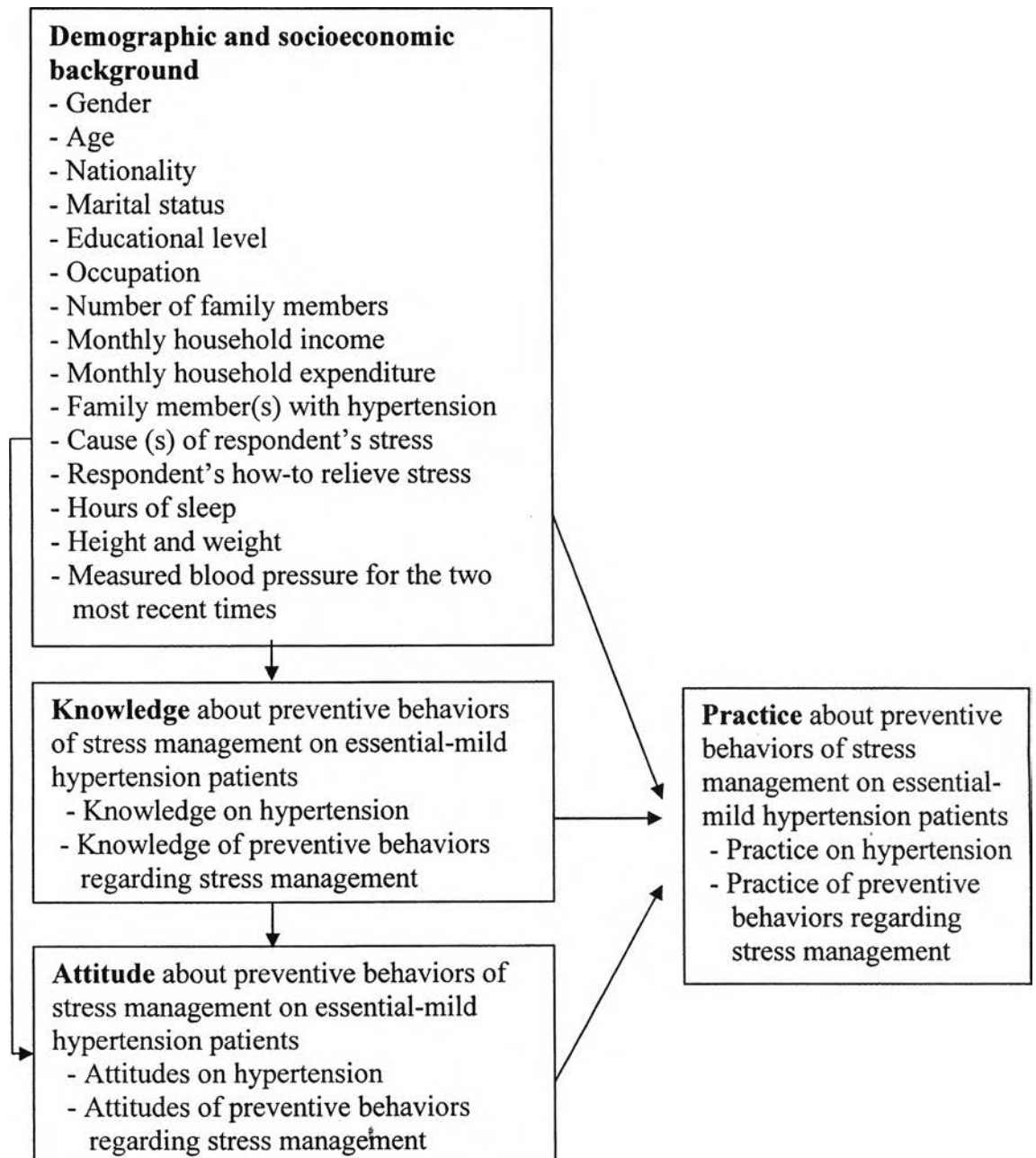


Figure 1: Conceptual framework for the study