

## **An Evaluation on the Health Promotion Behavior of Hypertension Patients Receiving Treatment at Langkha Subdistrict Health Promoting Hospital, Muaklek District, Saraburi Province**

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### **Abstract**

This study gathered general information regarding health promotion behavior from the population of hypertension patients who received treatment at Langkha Subdistrict Health Promoting Hospital, Saraburi province. A survey with questions in ten areas of behavior was given to the 69 hypertension patients at the hospital. The respondents indicated a very good conformity in two areas and the remaining eight areas showed good conformity to positive health promotion behavior. According to the results of this study, there is indication that the Langkha Subdistrict Health Promoting Hospital is providing adequate health promotion behavior initiative for hypertension patients and they should continue with regular health promotion initiatives including training programs, brochures and establishing exercise groups within the community.

**Keywords:** Hypertension, Health Promotion Behavior

### **Background**

In the industrialized world, 25% of 65–69 year olds and 50% of 80–84 year olds are affected by two or more chronic diseases at the same time (*The World Health Report 2008*). In 2008 cardiovascular disease was responsible for the largest proportion of NCD deaths under the age of 70 (39%), followed by cancer (27%). Chronic respiratory disease, digestive disease and other NCDs were responsible for approximately 30% of deaths (WHO, 2010).

In Thailand non-communicable diseases such as diabetes, hypertension and cardiovascular disease are rapidly increasing and the diseases are becoming more life threatening. Contributing factors for these diseases are that patients do not practice healthy habits, such as aerobic exercise and eating food; and the complications of these diseases affect the quality of patients' life in a negative way.. In 2004, the Director of the Thailand Bureau of Non-communicable Disease Department of Disease Control, Ministry of Public Health, said that "Changes in lifestyle affect the values of food consumption, adding amenities of everyday life into more urban society lead to an increased risk of heart disease and stroke that spread widely and increasingly. High blood pressure is a major cause of death. Together with stroke, ischemic heart disease and kidney disease, they are the top 5 leading causes of death in the country." In 2010 the annual report stated that admission to the hospital of hypertension patients increased 4.7 times between 2000 and 2009 (Bureau of Non-Communicable Disease Department of Disease Control, Ministry of Public Health, 2010).

Currently, high blood pressure is increasing and can cause disease in people of all age groups. Possible causes can be from many factors, either non-modifiable such as genetics, or modifiable such as dietary habits. Thailand is a developing country; the economy has changed a lot. The people have to work to earn more money to live, so they don't have sufficient time for self-care, choose an inappropriate diet, and lack exercise. Hypertension is a chronic disease not able to be cured, but the blood pressure can be controlled. The gradual nature of the disease is like a social disaster. In the first stage, the symptoms cannot be seen obviously. The pathology of the disease will spread slowly until the symptoms become more severe and permanent. Drugs is the only treatment to reduce the severity of symptoms; delay in treatment allows more complications, which

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requires a longer term of treatment. If it is treated well continuously, the quality of life will be improved and patient's symptoms will be decreased. . If it isn't treated well enough and patients are not able to take care of themselves, symptoms can be severe and complications occur that can lead to premature death (Bureau of Non-communicable Disease Department of Disease Control, Ministry of Public Health, 2009). Health behavior practices must be integrated consistently as part of a pattern of life to reduce health problems and prevent and control complications in the patients. This will finally lead to the well-being of life. (Pender, 1987)

The number of patients with hypertension is increasing at Langkao Subdistrict Health Promoting Hospital, Muaklek District, Saraburi Province and complications such as ischemic heart disease, myocardial infarction, stroke (broken blood vessel in the brain) and chronic renal failure are occurring. It happens because the patients don't practice good health behavior.

Because of the above background, it was decided to study health promotion behavior of hypertension patients receiving treatment at Langkao Subdistrict Health Promoting Hospital, Muaklek District, Saraburi Province. The following objectives were to emphasize that patients behave correctly, to know how to promote good health, to reduce the risk of complications in patients with hypertension and to reduce the incidence of high blood pressure in the area of responsibility of Langkao Subdistrict Health Promoting Hospital, Muaklek District, Saraburi Province.

## **Objective**

To study behavior practices of hypertensive patients who receive treatment at Langkao Subdistrict Health Promoting Hospital, Muaklek District, Saraburi Province.

## **Research Method**

This research used a survey to study health promotion behavior of hypertension patients who were registered in the non-communicable disease department of Langkao Subdistrict Health Promoting Hospital, Muaklek District, Saraburi Province."

## **Population and Sample Group**

The population used in this study is the patients who have been diagnosed by a physician as a person who is suffering from high blood pressure and are residents and registered in the non-communicable disease department of Langkao Subdistrict Health Promoting Hospital, Muaklek District, Saraburi Province. Because the population is only 69 people no random sample was taken.

## **Research Tool**

The health behavior questionnaire was developed by the researchers and adapted from the research questionnaire of the Study of Health Promotion Behavior of Hypertension Patients Receiving Treatment at PiHarnDaeng Subdistrict Health Promoting Hospital, Mueang District, Suphan Buri Province (Nuttapus Jeanpakdee, 2010) and the research of Self Care Behavior Development of Hypertension Patients Receiving Treatment at MueangKan Municipality Community Clinic, MaeTaeng District, Chiang-Mai Province (Kornkamol Ruangvut, 2011) and refer to the concept of Pender's health promotions (Pender, 1987).

This questionnaire was divided into two parts. Part one has ten general data questions for sex, age, marital status, education level, occupation, income, right for treatment, duration of illness, complications, and person who prepares food for hypertension patients. Part two has questions about 10 areas of health behavior that include 36 questions -- 7 for the ability of self-care in general, 6 for nutrition practices, 4 for exercise and leisure activities, 2 for sleep patterns, 4 for eliminating stress methods, 2 for realizing the value of self worth, 3 for purpose in life, 2 for relationships with others, 2 for environments control, and 5 for the use of health services. The rating scale has 4 choices: Practice regularly=4, Practice often=3, Practice sometimes=2, I never practice=1. The evaluation is based on the 10 indicators of Lifestyle and Health Habits and modified questions from The Health Promoting Lifestyle = HPLP (Walker, et al. 1987).

Interpretation of the average scores on the questionnaire of self-care behaviors of patients with high blood pressure are based on four groups as follows: 1.00 – 1.75 Need improvement , 1.76 – 2.50 Practicable, 2.51 – 3.27 Good, 3.28 – 4.00 Very good.

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## Quality Monitoring of Tool

- 1. Content Validity** The researchers had modified a questionnaire and had 3 specialists proof the validity of the content and language use.
- 2. Finding Confidence** The researchers used the proofed questionnaire with 30 hypertension patients who received treatment at Sounoi Subdistrict Health Promoting Hospital, Muaklek District, Saraburi Province. Then the questionnaire was analyzed using Cronbach's alpha coefficient method.

## Data Collection

The validated questionnaire was administered by the senior students of Mission Nursing Faculty and Langkha Subdistrict health volunteers. They used the questionnaire to interview the hypertension patients at Langkha Subdistrict Health Promoting Hospital, Muaklek District, Saraburi Province.

## Data Analysis

The 69 completed questionnaires collected from hypertension patients were analyzed in Excel. Basic statistic concepts like frequency, percentage, means and standard deviation are used for general data and health behavior scoring.

## Research Result

The results of the study on health promoting behavior of patients with hypertension who received treatment at Langkha Subdistrict Health Promoting Hospital, Muaklek District, Saraburi Province are summarized in the following two tables.

**Table 1** Demographic and general data of hypertension patients who received treatment at Langkha Subdistrict Health Promoting Hospital, Muaklek District, Saraburi Province.

Item	Number	Percent
Gender		
Male	25	36.2%
Female	44	63.8%
Age Above 60	35	50.7%
Married	43	62.3%
Elementary level and above	45	65.2%
Employed	32	46.4%
Two Family Members	25	36.2%
Cook for Self	41	59.4%
Income from One Family Member	25	36.2%
Annual income less Than 5,000 THB	28	40.6%
Universal Health Care Coverage	59	85.5%
Hypertensive for 1-5 years	46	66.7%
No Complications	52	75.4%
Complications		
- Cerebro-vascular stenosis	6	35.30%
- Angina pectoris	3	17.65%
- Myocardial infarction	3	17.65%
- Diabetic nephropathy	2	11.77%
- Hyperlipidemia	1	5.88%
- Cardiac arrhythmia	1	5.88%
- Stroke	1	5.88%

Over 60% were in three categories – married, female and achievement of at least an elementary level of education. More than 85% had universal health care coverage. Slightly more than half were above 50 years of age. Almost half were employed. Although 67% had been hypertensive for 1-5 years, 75% had no complications.

**Table 2** The mean, standard deviation and interpretation of the ten categories of health promoting behavior of hypertension patients who receive treatment at Langkha Subdistrict Health Promoting Hospital, Muaklek District, Saraburi Province (N=69).

Health Promoting Behavior	$\bar{X}$	S.D	Level
Environgments control	3.43	0.81	Very good
Purpose in life	3.33	0.94	Very good
The ability to self-care in general	3.25	1.06	Good
The use of health services	3.20	0.99	Good
Eliminating stress methods	3.03	1.11	Good
Sleep patterns	2.90	1.20	Good
Nutrition practices	2.88	1.02	Good
Relationships with others	2.83	1.16	Good
Exercise and leisure activities	2.88	1.02	Good
Realizing the value of self worth	2.61	1.10	Good
Average of Total Health Promoting Behaviors	3.02	1.05	Good

Table 2 shows that purpose in life and environment control was very good, and the other health promoting behaviors were good. No behaviors fell into the practicable or need improvement level. The mean of the total health promoting behaviors is 3.02 which is good.

## Discussion

According to Table 2 the overall average was 3.02 (good level) with the patients ranking very good in two areas – purpose in life and environment control. The other 8 behavior areas ranked at the good level which demonstrated that education of hypertension patients is successful but could be improved in some areas.

A similar research was done by Jeanpakdee (2010) who studied the Health Promotion Behavior of Hypertension Patients Receiving Treatment at PiHarnDaeng Subdistrict Health Promoting Hospital, Mueang District, Suphan Buri Province. The results of this study indicated that health promoting behavior was in a very good level with an overall mean equal to 3.33. The 5 areas of ability to self-care in general, eliminating stress methods, realizing the value of self worth, relationships with others and use of health services were in a very good level. Five others include nutrition practices, exercise and leisure activities, sleep patterns, purpose in life and environment control were in a good level.

Another related study conducted by Pomchan (2009) studied health promoting behaviors among hypertensive patients at the Phisalee Hospital, Nakhon Sawan Province. This study found that the patient had a moderately appropriate level of overall health promoting behaviors. The result of the study could be a developmental guideline for hypertensive patients in health promoting behavior to prevent complications. Supeekam (2008) studied the health promotion of elderly with hypertension in Phochai Sub-district, Mueang District, Nongbualamphu province, and it was found that elderly patients with hypertension practice nutrition and stress management at “sometimes right practice level” (equal to “practicable level”). For overall practice, the right and continuing practice level was significantly different at the 0.01 significance levels. Pender (1987) found that a person with higher responsibility can influence a patient in a positive way and also can help protect and decrease risk of complication.

In summary, if hypertension patients have been consistently encouraged by health personnel, it will cause them to have better quality of life and can be a role model for families in other communities.

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## Conclusion and Future Directions

Patients who received treatment at Langkao Subdistrict Health Promoting Hospital, Muak Lek District, Saraburi Province, have practiced health promoting behavior at a good level. This is encouraging and it is hoped that this Hospital will continue to educate patients about health promoting behavior. Furthermore, the Hospital could disseminate best practices to other hospitals in the nearby districts. Nonetheless, there should be additional studies to develop or adjust health promoting behaviors in hypertension patients under the responsibility of Langkao Subdistrict Health Promoting Hospital, Muaklek District, Saraburi Province. Finally, there should be initiatives placed to explore factors which may contribute to complications among patients who self-care, and those who are receiving medical attention.

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