

CHAPTER V



PRESENTATION

This chapter provides a set of slide presentation for final examination. The background of hypertension, epidemiology, and situation of target area were included. The proposal of self-care promotion, an intervention to improve self-care practice for patients with hypertension, objectives, hypothesis, conceptual framework, research method, intervention activities, data processing and data analysis were shown. In addition, in data exercise part, the procedure of questionnaire construction and reliability estimation has been presented. Furthermore, lesson learnt was presented at the end of the presentation.

**Self-Care Promotion: An Intervention to Improve
Self-Care Practices for Hypertensive Patients in
Pasak Sub-district, Chiang Rai Province**

By

Orapin Chaipayom

Outline of presentation

- ◆ Part I Background of hypertension, target area, and situation analysis
- ◆ Part II Research questions, objectives, hypothesis, conceptual framework, and research method
- ◆ Part III Intervention activities, and data analysis
- ◆ Part IV Data exercise

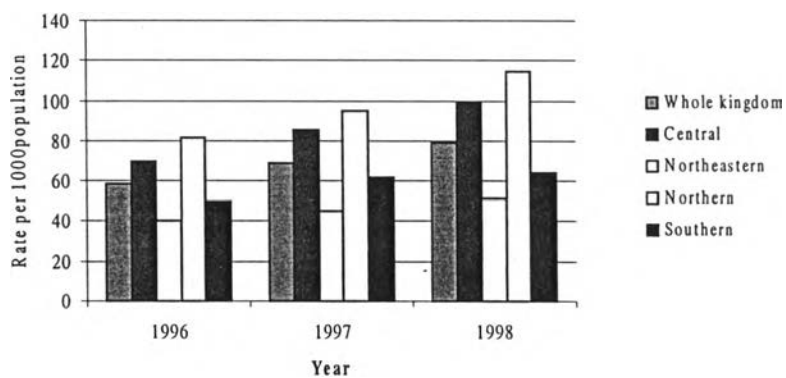
Introduction

- ◆ Hypertension is the most common cardiovascular disorder, one of the major risk of cardiovascular mortality (WHO, 2002)
- ◆ Changes in people lifestyle non-communicable disease have become to leading cause of health problem
- ◆ Circulatory disease are estimated to now account for 25% of all death in developing countries (WHO, 1997)
- ◆ Cardiovascular disease is the 1st leading cause of death among Thai people (MoPH, 2002)

The increasing importance of hypertension

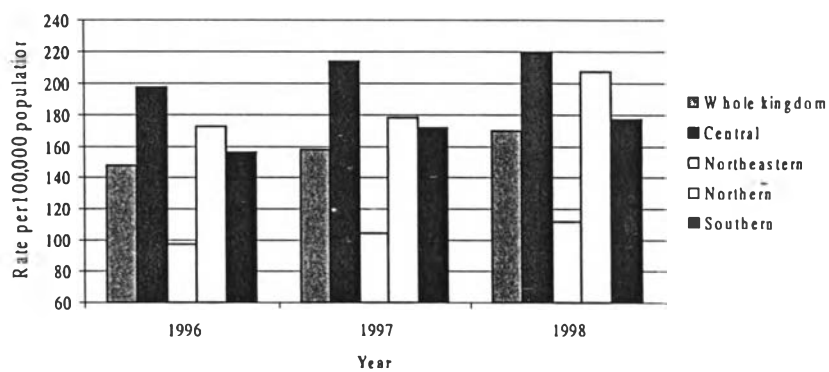
- ◆ Hypertension report rate up to 20-26% of the adult population.
- ◆ Since people live longer, they are exposed to disease of old age such as hypertension and cardiovascular disease.
- ◆ Some 60 million people worldwide have high blood pressure and nearly 3 million die every year as a direct result.
- ◆ Seven out of every 10 people with hypertension are not being treated adequately.

Rate per 1,000 population of out - patient visiting with diseases of the circulatory system at government hospitals, 1996-1998.



Source: Public Health Statistics, Ministry of Public Health; 1998

Rate per 100,000 population of in-patients with hypertensive diseases at hospitals, 1996-1998



Source: Public Health Statistics, Ministry of Public Health; 1998

Definition of Hypertension

Hypertension is defined as a systolic blood pressure \geq 140 mmHg or greater and/or diastolic blood pressure of 90 mmHg or greater in subjects who are not taking antihypertensive medication after repeated measurement.

Source: WHO Guideline for management of hypertension, 1999

Causes of hypertension

- ◆ **Essential hypertension: a cause cannot be determined**
- ◆ **Secondary hypertension: the increase in pressure results from some complications such as medication, kidney disease, adrenal disease, etc.**

Risk factors

◆ Factors cannot control

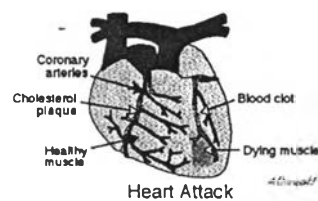
- Age
- Race
- Gender
- Family history

◆ Factors can control

- Obesity
- Inactivates
- Tobacco use
- Sodium sensitivity
- Low potassium
- Excessive alcohol
- Stress

Organ damage due to hypertension

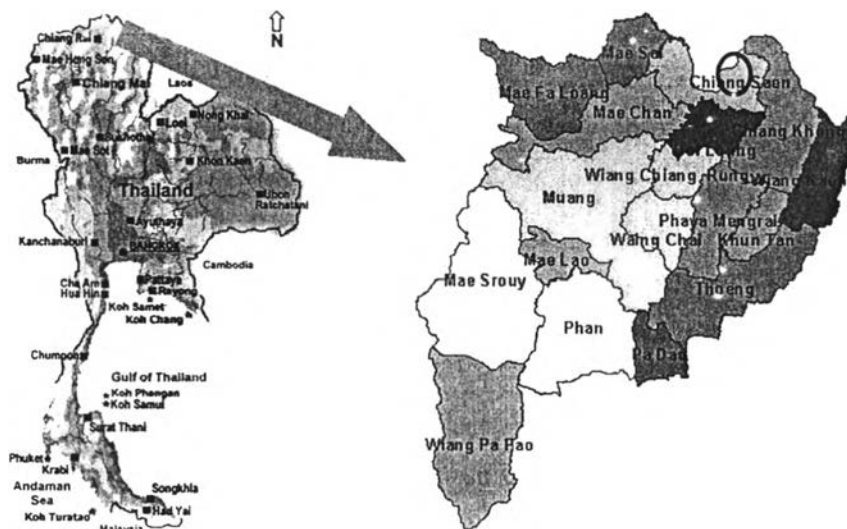
- ◆ Heart
- ◆ Cerebrovascular system
- ◆ Kidney
- ◆ Retina



Treatment of hypertension

- ◆ Pharmacological treatment
- ◆ Lifestyle modification
 - Smoking cessation
 - Weight reduction
 - Limit alcohol
 - Reduction in salt intake
 - Dietary change
 - Increase physical activities
 - Manage stress

Chiang Rai Province



Situation analysis of hypertension problem in Pasak Sub-district

- ◆ **A significant increase of hypertensive patients each year**
- ◆ **20% of patients were loss follow up**
- ◆ **Failure of routine counseling**
- ◆ **5% of hypertensive patients suffering form complications each year**
- ◆ **Poor perception and behavior have been found in target area**

Source: Annual Report, Pasak Sub-district, 2001

Research Questions

- 1. Can a self-care promotion program given to hypertensive patients improve the perceived severity and vulnerability to complications, self-efficacy and response efficacy of preventive behaviors in preventing complications?**

- 2. Can a self-care promotion program given to hypertensive patients improve their self-care practices?**

General objective

To assess the effectiveness of a self-care promotion program to improve self-care practices among hypertensive patients

Specific objectives

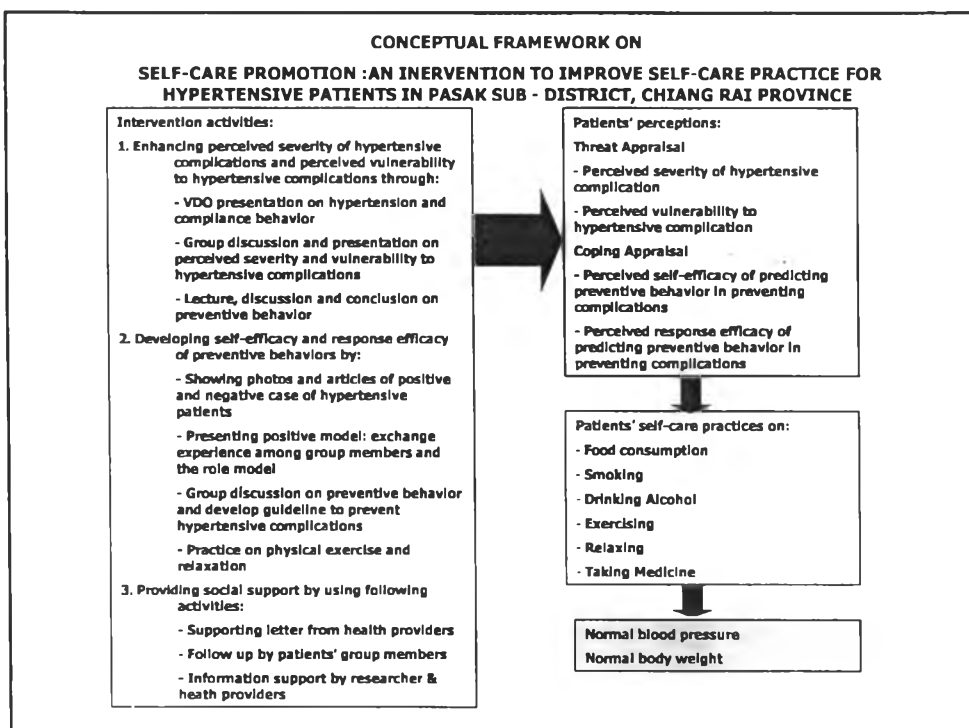
- ♦ **To develop the appropriate self-care promotion program for hypertensive patients**
- ♦ **To improve perceived severity, vulnerability to complications, self-efficacy and response efficacy of preventive behaviors in preventing complications of hypertensive patients**
- ♦ **To improve self-care practices of hypertensive patients through a self-care promotion program**

Specific objectives (Con.)

- ♦ **To compare the perception and self-care practices between study group and control group**
- ♦ **To compare the perception and self-care practices before and after intervention in study group and control group**

Hypothesis

A self-care promotion program can improve perception and self-care practices of hypertensive patients



Research Method

Study design:

Quasi-Experimental design with pretest and posttest

Study group:

Hypertensive patients in Pasak Sub-District,
Chiang Rai province

Control group:

Hypertensive patients in Mae Kom Sub-District,
Chiang Rai province

Inclusion and Exclusion criteria

Inclusion Criteria

- Hypertensive patients, who live in the study area, able to communicate.
- Willing to participate entirely program.

Exclusion Criteria

Hypertensive patients, who have severe illness, mental problem, and are not able to communicate

Data collection instrument

Part I Socio demographic data

Part II Hypertensive patient's perception on threat

a) Perceived Severity of Hypertensive Complications.

b) Perceived Vulnerability to Hypertensive Complications.

Part III Perceived Self-efficacy

Part IV Perceived Response Efficacy

Part V Self-care practices

Phase II Baseline survey & program development

Objectives

- To find out the current perception and self-care practices
- To develop self-care promotion program

Activities

- Training research assistants
- Collecting baseline data
- The results from structured questionnaire will be analyzed
- Self-care promotion program will be constructed

Duration 2 months

Phase III Program Implementation

- Objectives**
- To provide the information in self-care practices
 - To improve the perception and self-care practices

- Activities**
- Three workshops will be held once per 2 months
 - The exercise program will be practiced.
 - The working committee will monitor the self-care promotion program

Duration 6 months

Phase IV Program Monitoring and Evaluation

Objectives

- To advice and support self-care behavior in study group
- To ensure that the study group has appropriate self-care behavior

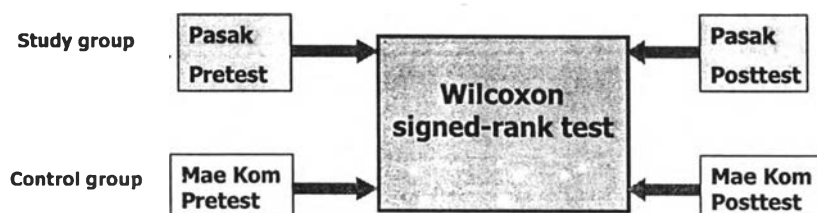
Activities

- The workshops will be monitored by the working committee.
- The representative of hypertensive patients and researcher will monitor self-care practices in each group through home visit

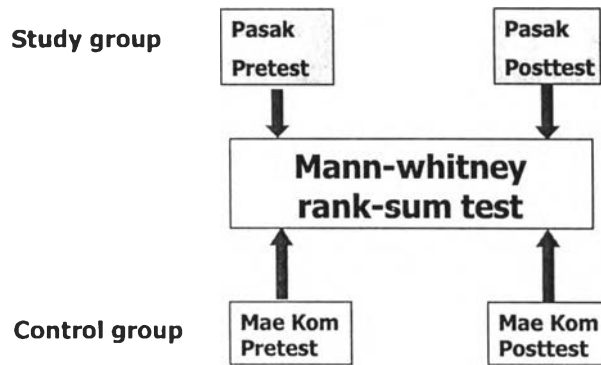
Process and outcome evaluation

- Process evaluation
- Perception Evaluation
- Behavior Evaluation

Data analysis



Data analysis (Con.)



Time table

| Activities | Year 2003 | | | | | | | | | | | | Year 2004 | | | | | |
|---|-----------|---|---|---|---|---|---|---|---|----|----|----|-----------|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 1 | 2 | 3 | 4 | 5 | 6 |
| 1. Promotion self-care program | | | | | | | | | | | | | | | | | | |
| - Asking the permission from the community leader | X | | | | | | | | | | | | | | | | | |
| - Public Announcing | X | X | | | | | | | | | | | | | | | | |
| - Set up working committee | | X | | | | | | | | | | | | | | | | |
| 2. Baseline survey & program development | | | | | | | | | | | | | | | | | | |
| - Training Research Assistants | | | X | | | | | | | | | | | | | | | |
| - Data collection for pretest | | | X | | | | | | | | | | | | | | | |
| - Data processing and analysis | | | | X | | | | | | | | | | | | | | |
| - Meeting with working committee | | | | X | X | X | | | | | | | | | | | | |
| - Construct self-care program | | | | | | X | X | | | | | | | | | | | |
| - Preparing material for workshop | | | | | | X | | | | | | | | | | | | |
| 3. Program implementation | | | | | | | | | | | | | | | | | | |
| - 1st workshop | | | | | | | X | | | | | | | | | | | |
| - 2nd workshop | | | | | | | | | X | | | | | | | | | |
| - 3rd workshop | | | | | | | | | | | X | | | | | | | |
| - Program monitoring | | | | | | | | X | X | X | X | X | | | | | | |
| 4. Program evaluation | | | | | | | | | | | | | | | | | | |
| - Workshop evaluation | | | | | | | X | | X | | X | X | X | | | | | |
| - Data collection for posttest | | | | | | | | | | | | | | | X | | | |
| - Data processing and analysis | | | | | | | | | | | | | | | X | X | X | |
| 5. Report writing | | | | | | | | | | | | | | | | | X | X |

Budget require: 466,000 Baht

Data Exercise on

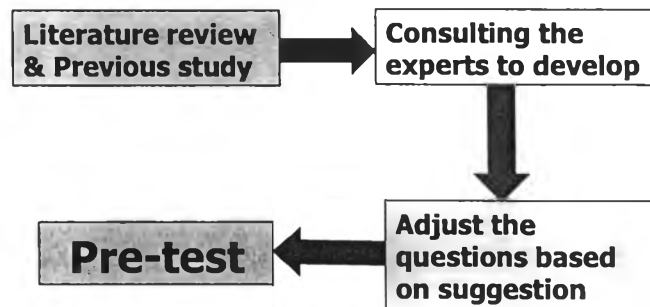
Reliability Assessment



Four main variables need to assess

- **Perceived severity of hypertensive complications,**
- **Perceived vulnerability of hypertensive complications,**
- **Perceived self-efficacy of preventive behavior, and**
- **Perceived response efficacy of preventive behavior**

Develop of the instrument



Pre-testing Procedure

1. Mea Chan district was chosen for the pretest



2. Asking the permission from health staff and community leader

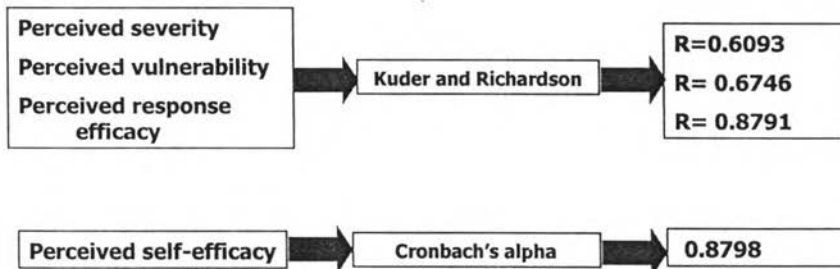


3. Hypertensive patients in Mea Chan district were approached



4. Data was coded and entered into the computer program

Internal consistency method



Reliability of 4 variables = 0.8978

Lesson learnt

- Understanding clearly in the concepts that we want to measure.
- It will be easier if we can conduct the pretest at the health center.
- Household survey is very useful for a researcher who can observe other factors that might influence self-care practices of hypertensive patients.

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