

CHAPTER II

PROJECT DESCRIPTION

2.1 Introduction

There are 3 sectors responsible for public health services in Yasothon Province. These are Yasothon Hospital, Yasothon municipal sector and Yasothon Public Health Center. Separate responsible area is allocated for each sector with inter-liaison among three sectors. Operation of each sector emphasizes on different aspects of healthcare work. Yasothon municipal sector, which focuses on the structure of public facilities, encountered shortage of healthcare personnel and financial budget. Yasothon Public Health Center, which is a small healthcare subunit under the Public Health Office of Muang Yasothon District, also faced shortage of health personnel, knowledge body and financial budget. On the other hand, Yasothon Hospital was found to have better potential in terms of available personnel, technical knowledge, budget and equipment. Therefore, in developing of a healthcare promotion program for chronic patients, especially with hypertension patients, in the urban community, there should be a clear model of hypertension patient care approaches with well collaboration, liaison, information exchange as well as mutual support among the three sectors in order for hypertension patients to effectively develop and practice self-care behaviours.

The investigator, therefore, set up a health promotion activity program for self-care development of essential hypertension patients with collaboration from the above three healthcare sectors. The program adopted participatory education that emphasizes on actual participation of the patients in the learning process through experience and opinion sharing in group discussion sessions. The patients were allowed to identify their problems together and analyse for casual factors and sources of the problems using critical thinking to achieve correct understanding and perception of the knowledge. In addition, nurses from 3 sectors conducted home visit to provide advice, encouragement and support for healthcare information on a continuous and regular basis. The nurses were to help solve difficulties in any step of self-care activities with the patients and their family members eventually leading to correct health behaviour. This, in turn, reduces risks of developing other acute hypertension-related disease, such as, critically severe hypertension and cerebral hemorrhage, which can cause death. In addition, it reduces an effect of related disease on the target organs resulting in more chronic disease conditions such as stroke, heart failure, cerebrovascular disease, and renal failure. All these related diseases require expensive cost for treatment and are a burden to the family, society and, eventually, the country.

Participation of patients in learning self-care behaviour helps them to become aware of the problems and adjust their lifestyle for self-caring. The patients then do not develop other related diseases, have better quality of life, and are no longer a burden to family and society. Self-caring is costless and the knowledge forever-retained with the patients. In addition to its benefits to an individual, self-caring also leads to change at group and overall social level and can be usefully applied with local healthcare service

system such as “Home health care” program. There is also development of knowledge body in caring for chronic patients. However, collaboration among all relevant official units is required for healthcare operation within the urban area.

2.2 Objectives

General objectives

To develop self care model for essential hypertension patients using participatory learning.

Specific objectives

1. To organize training activities in self care behaviour for hypertension patients with emphasis on patient participation.
2. To support and promote self care behaviour of the patients at home.
3. To evaluate the efficacy of the training program by participatory learning of the patients and the home visit program on self care function of essential hypertension patients.

2.3 Approaches, Methods and/or Techniques

This project consisted of three phases, namely, phase 1 established the baseline data among the target population; phase 2 involved a 2-day training program; and phase

3 was the follow-up visit. The 2-day training program was an intensive education program with emphasis on prevention and self-care behavior. The method of instruction centered on participatory learning process involving full participation from the project participants. The follow-up visit was used as a retraining strategy following the 2-day intensive training program. This was done for 3 consecutive months where the project team made home visits once a month and provided additional education on issues that directed toward individual needs. Evaluation used pre-and post test with self-control and comparison of the study group data with the control group data.

2.3.1 Target study subjects

The target participants were 105 hypertension patients who live in Muang Yasothon municipal area and registered for medical treatment at the Hypertension Clinic of Yasothon Hospital during October 1998-February 2000. The selection criteria of participants for this project were:

1. Missed 3 consecutive medical appointments during the past year and was found to have either of incorrect self-care behaviours such as lack of exercise or lack of regular exercise and having stress.]
2. Patients diagnosed with essential hypertension and were under antihypertensive medicines. The patients had high blood pressure at mild to moderate level (using diastolic pressure criteria between 90-109 mm.Hg) and there was no sign of other related diseases such as paralysis, heart disease, kidney disease and cataract or blind.
3. Duration of disease was not less than 3 months and not longer than 5 years.
4. Male or female

5. No physical and communication limitations
6. Participation through out the project was on voluntary basis.

Rationale of the participant characteristic criteria

The high blood pressure level was imposed at mild and moderate levels due to their similar symptom severity. There is no difference in medical treatment methodology and no hypertension-related symptom found at these levels.

Post-diagnosed duration was to be no less than 3 months as hypertension diagnosis requires several measurements of patients' blood pressure and identifies "hypertension", if three consecutive results are higher than normal. Duration of no longer than 5 years was imposed to reduce discrepancy of patients' disease experience and self-care problems within the target groups.

The patients were limited to the residents of Muang Yasothon municipal area as urban patients by nature have less opportunity to share their knowledge due to relatively less social meetings compared with rural patients. The participatory learning (PL) would help to promote correct health behaviour. In addition, the limited study area is beneficial and convenient for data collection as no distant traveling was required and this was especially beneficial to work responsibility of the investigator.

No physical and communication limitation allowed the patients full freedom in using their listening, thinking and practicing skills in learning and participating in the activities.

Outcome of recruitment process of the target groups

Of 105 hypertension patients, there were 46 patients found to meet the above criteria and 32 patients of this group volunteered to participate in the study project. However, only 31 patients were able to join throughout the project duration, so called “the study group”.

2.3.2 Activities

Project activities were as follows:

1. Preparation
2. Training program by participatory learning approach
3. Home visit or re-training

1. **Preparation** began in May 2000 as follows:

- Training venue was the Health Promotion and Rehabilitation Center and the Urban Community Medical Center, Yasothon Hospital.
- Invitation letter was distributed to the target patients for voluntary response, with assistance from urban community healthcare volunteers and public health staff within the area. 31 patients of 32 respondents were able to participate throughout the project.
- 4 project assistants were recruited with the following qualifications:
 - 1 professional nurse who had at least two-year experience in group activity design and willing to cooperate in the project. She functioned as a teaching assistant in participatory learning.

- 3 nurses, who had at least two-year experience in working within Yasothon urban community and willing to cooperate in the project, each from 3 responsible sections of Muang Yasothon District, namely, Yasothon Hospital, Yasothon Municipal Sector and Public Health Center of Nai Muang Sub-district. These nurses functioned as teaching assistants in participatory learning session and were responsible for home visit to the allocated patients as well as collecting of pre and post intervention data.
- 4-hour orientation meeting was conducted for 4 project assistants at 1 week prior to the actual training session.
- Instruments used for data collection were tested for quality assurance at 1 month prior to the training session as outlined below:
 - Questionnaire for hypertension patients and home-visit record forms were reviewed and proven for content validity and language accuracy by a lecturer specializing in general medicine and surgical nursing care, at KhonKean University, a general medicine physician of Yasothon Hospital and 2 professional nurses of the Hypertension Clinic, Yasothon Hospital. The questionnaire and the form were revised according to their advice as follows:
 - i) Appendix 2 questionnaires for hypertension patients: patient's height was removed from the General Data Section due to its irrelevance with the project objectives. Questions on daily activities such as health conditions, other disease, sleeping habit, and hobbies were added into this section. The content of questions # 4, #10, #12, #13

and #15 in Part 2 was revised to be more unambiguous. Finally, additional definition of the following words "*Regular practice, Occasional practice and Never practice*" was added in Part 3.

- ii) In-depth interview (Appendix 3)
 - iii) Schedule of participatory learning (Appendix 4)
 - iv) Curriculum of participatory learning (Appendix 5) was revised as follows: Design to be learning plan rather than teaching plan, as the patients would learn from one another. There were limitations of reading and writing activity, as most of the study subjects were elderly, the activities were then adjusted to be more of speaking. Considering for patients' capability and concentration on the activities, duration for each activity was extended to a more appropriate length.
- The proven questionnaire for hypertension patients was pilot tested with a group of 10 essential hypertension patients who had similar characteristics to the study group. It was found that, overall, the patients could understand and answer most of the questions, except question # 15 of Part 2 about Hypertension Facts, which was "*Weight loss can help lessen danger from heart failure and broken veins?*" The patients did not fully understand this question, therefore, additional phrase was included to the question for clearer and complete meaning to be "*Overweight condition of hypertension patients might increase risks of heart failure and broken veins, therefore reduction of the body weight can lessen risks of developing*

those conditions do you think this statement is correct, incorrect or don't know?". Each patient was allowed 15 minutes to complete the questionnaire.

2. Training program

Phase 1: Baseline data

Objectives

1. To obtain general information of essential hypertension patients in study and the control group.
2. To assess knowledge in hypertension and self-care behaviours of the study group and the control group prior to intervention.

Data collection method

22 May 2000: The investigator observed hypertension service and interviewed the hypertension patients about general conditions of medical services and health education provided to the patients and their relatives at the Hypertension Clinic, Khumkhuenkeaw Hospital.

23 May 2000: The investigator observed and interviewed the hypertension patients about general conditions of medical services and health education provided to the patients and their relatives at the Urban Community Medical Center, Yasothon Hospital.

24 May 2000: The investigator observed and interviewed the hypertension patients about general conditions of medical services and health education provided to the patients and their relatives at the Hypertension Clinic, Yasothon Hospital.

29-30 May 2000: The investigator and project assistant team conducted an interview meeting for the study group at 7 places of urban community healthcare volunteers' house in each area.

6-7 June 2000: The investigator and project assistants conducted an interview meeting for the control group at the village function center of Moo 1 and Moo 2, Loom Pook Sub-district, Khumkuenkeaw District, Yasothon Province.

Phase 2: Training program for the study group

Objectives

1. To promote correct knowledge and understanding about hypertension and appropriate self care behaviour in the study group.
2. To adjust and change self care behaviour in the study group

Procedure

In the training program by participatory learning, the study subjects were divided into two groups for maximum participation in the activities and to be appropriate with the number of speakers for each group as follows:

Group 1 contained 20 study subjects who agreed to participate in the training session between 8.30-16.00 hours of 12-13 June 2000 at the Health Promotion and Rehabilitation Center, Yasothon Hospital.

Group 2 was not able to participate in the training session proposed in the schedules (19-20 June 2000) due to continuous raining and it was inconvenient to organize the training and for the patients to travel a far distance from their home to Yasothon Hospital. The patients then requested to relocate the training venue to be within the community area. The actual training session was 8.30-16.00 hours of 27-28 June 2000 at the Muang Yasothon Community Medical Center, Yasothon Hospital with total of 12 participants.

The training course required a total of 12 hours. The previous schedule of 3-day of 4 hours a day was rejected, as it was not convenient for the participants to travel. The training duration was then adjusted to 2 days of 6 hours a day.

Training schedule

Group 1 all 20 patients participated through out in the 2-day training course.

Group 2 all 12 patients participated through out in the 2-day training course.

Day 1 activities

1. Inform the objectives, procedure, and basic agreements of the project for mutual understanding and ice breaking. Methodology used for each activity informed (Appendix 5).

2. Introduce into the training activities using a group-relation session in order for the group members to meet, talk and become acquainted with one another. The purpose was also to energize and prepare the participants for the rest of the activities.
3. Allow the participants to pair and share their experience and opinions about hypertension disease using the instruction sheet as a guideline.
4. Divide the participants into a group of 6 people and assign each group to discuss the following topics:
 - *What cause hypertension and what are symptoms of hypertension?*
 - *What will happen if hypertension is not treated or controlled? Why?*

Each subgroup presented outcome of the discussion correctly and exchanged ideas of the casual factors such as family history. That is, some patients stated that they did not have any relatives who previously had hypertension.

5. Project assistants summarized all concepts and described about hypertension facts, demonstrated with video show about hypertension then connected the experience with the concepts.
6. Each group helped summarizing topics and wrote on a presentation chart.
7. Reviewed the content of module1 by random tests of 3 participants.
8. Group relation activity to introduce the participants to a learning lesson about hypertension-related diseases and how to prevent them.
9. 2 group members role-played the story of "Por Yai Sri" which is a story about a hypertension patient who developed paralysis. The two members played well and other patients were interested in the role-play activity.

10. The other 2 members expressed their feelings and opinions about the role-playing such as “ *they feel sorry for Por Yai Sri's wife and would like Por Yai Sri to take medicines everyday*”.
11. Grouping of 6 people and discuss the following topics:
 - *Do you think hypertension patients should have lifestyles like normal people? Why?*
 - *What will happen if hypertension-related disease is not prevented?*
12. The author summarized the concepts and believes about hypertension-related diseases illustrated with pictures and transparency.
13. The same groups of 6 people summarized self-care activities for hypertension patients and wrote a conception quotation inviting the group members practice self-care routines to prevent other related disease.
14. The participants met a pharmacist and discussed about taking anti-hypertensive medicines. This session received wide attention and participation from the patients.

Day 2 activities

1. The author allowed the patients to review the study materials from Day 1.
2. The author briefly lectured about self-caring of hypertension patients.
3. Introduced into learning lessons by allowing the participants to pair and share their experience about daily eating behaviour, exercising, stress management and medication intake. The teaching staff noted statements expressed by each pair.

4. Divided the participants into 4 groups and allocated each group with the following topics to discuss and present the outcome summary.
 - Group 1: what type of foods hypertension patients should take? Why?
 - Group 2: What are suitable exercise activities and what are their effects?
 - Group 3: What are your stresses, effects and stress management strategies?
 - Group 4: How to practice correct methodology for medication intake and follow-up examination?
5. The investigator demonstrated exercise techniques and pulse measurement. Every participant practiced the exercise techniques, except 5 female participants who had arthritis problems and waist pain and could practice only some of the techniques.
6. Project assistants demonstrated and helped the patients practice stress management techniques and every participants were observed to be able to practice correctly.
7. All participants stated some benefits after practicing exercise activities and that stress management resulted in better feelings and relaxation. Regarding exercise, some patients adopted their convenient method such as walking, aerobics and body stretching. Some patients said they would apply Aunt Boonmee's techniques with their exercise routine.
8. Summarized potential problems and means of resolutions together and distributed exercise manuals.
9. Arranged appointment time and date for home visit of the project team.

10. Entertaining activities such as singing and dancing, provided thanking speech to all participants, and closed the training course.

Instruments employed in participatory learning program

1. Activity schedules for participatory learning
2. Videotape about hypertension produced by the Medical Department, the Ministry of Public Health.
3. Manuals for essential hypertension patients and exercise manuals compiled by the investigator.

Phase 3: Home visit/ or re-training

Objectives

1. To provide advice and support for self-care behaviours in the study group.
2. To ensure the study group being able to cope with their individual health problems and have correct self care behaviours.

Home visit schedule

One month after training program, 3 project team members conducted 3 home visits with 4 or 6-week interval basis. The schedule of home visit is shown in Table 2.1

Table 2.1 Post-training home-visit schedules

Group	Home-visit 1	Home-visit 2	Home-visit 3
1	7-21 July 2000	21-25 August 2000	18-22 September 2000
2	2-4 August 2000	4-6 September 2000	3-5 October 2000

Common home visits occurred between 13.30-15.30 hours and activities are summarized as follows:

1. Small talks and assessment of the previous home visit.
2. Check up body weight and blood pressure.
3. Suggestion and support to their problems.
4. Patient's in-depth interview form and cross check from their family (see also appendix 3).
5. 3 home-visits to 31 patients (total of 93 visits).
6. Post-test at home visit 3.

2.4 Activity Plan With Time Table

The activity plan with timetable for this project is shown in Table 2.2

Table 2.2 Work plan

Activities	1999	2000											2001			
	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Research Agenda/Priority Setting Process:																
1. document existing set-up	■															
2. identify current priorities and how they were established		■														
3. document consensus building process			■													
4. Drawing of sampling frame.				■												
5. present proposal					■											
6. testing and improve instrument						■										
Implementation																
1. Pre-test							■									
2. Health promotion activation Training								■								
3. Home Visit									■	■						
4. Post-test											■					
Analysis																
1. Data gathering													■			
2. Data encoding													■			
3. Data processing													■			
4. Data analysis														■		
Thesis writing																
Sumitting and promoting																■

2.5 Problems, Conflicts and Possible Means for Resolution

1. Training duration of 3 days of 4 hours a day was considered to be time consuming and cause traveling inconvenience; therefore, it was adjusted to 2-day continuous session. The training content remained the same with additional session of meeting pharmacists for the study group to meet and consult pharmacists about medicine matters.
2. The training venue was far from the residential area of group 2 participants; so, the venue was relocated to the Urban Community Medical Center, which was situated within the community area.
3. The training session for group 2 was postponed due to rain.
4. Some participants were quiet and did not express their opinions. The investigator, then, encouraged them to speak. However, some patients dominated the group and told too much of their own story, the investigator therefore adopted listening techniques and encouraged the participants to summarize the story or rotated speaking-turn to other participants. The training session then went on smoothly.
5. Some participants had arthritis problems and could not stand for a long time and as could not practice exercise of Aunt Boonmee's techniques that require a use of wood stick. The participants then could only practice the sitting and some other techniques.
6. Most participants were elderly patients and had writing difficulty. They could not write summary of their opinions so the investigator and other project staff had to help with the writing.

7. The home visit frequency was scheduled to be one visit per month; however, in some patients the interval was longer than one month due to time constraint of the responsible nurse, who was at that time on duty at countryside and sometimes had other urgent duties. The nurse was only recruited from of Yasothon municipal unit, who had a heavy range of responsibility. In addition, this public sector is under the Ministry of Interior, which pays attention more to administrative aspects than healthcare aspects. The home visit session was, therefore, deviating from the schedule.
8. Of the project participants, there were 2 female patients who had persistent high body weight (83 and 85 kgs) and could not reduce the weight due to unhealthy eating behaviours.