

CHAPTER III

RESEARCH METHODOLOGIES

This research project is the project descriptive to develop and build capacity of public health staff in providing client-centered health counseling services at eleven health centers in Muang district of Chonburi province. As these health centers will be upgraded and become the Primary Care Unit (PCU), the counseling services must be arranged to meet the PCU standard (Thailand Ministry of Public Health, Bureau of Health Service System Development, 2005).

3.1 Population and Sampling

3.1.1 Target population/participants

The researcher recruits two public health staffs working from each of the eleven health centers, which are under the supervision of Chonburi Hospital and will be upgraded to become the PCU, to participate in this project (so, they can substitute each other in case one of them is not available). As a result, the total number of the research population is 22 staff members.

3.1.2 Resource persons

The Director of the community health service center region 1 of the Ministry of Public Health (MoPH) is invited to join this project as a resource person, together with a nurse who will be his co-trainer in the group process.

3.2 Research Tools

The evaluation design includes formative and summative aspects of the training for public health staffs and applies four data collection tools to assess their achievements of intensive training and monitor the on-the-job training program. Quantitative and qualitative approaches are applied for data collection and analysis.

The researcher and two counseling experts from the Mental Health Center, Region 1 of MoPH will conduct the evaluation in term of knowledge, attitudes and skills using the following tools;

3.2.1 Client-centered counseling knowledge checklist

This test is developed to measure knowledge of nurses and public health staff before and after undertaking an intensive training program. Procedures of the test development are as follows;

- Conduct the literature review
- Design and develop a draft of the client-centered counseling knowledge test
- Consult three counseling experts to improve the draft in terms of contents and wording
- Design and develop questions for the test
- Pre-test the questions
- Revise the questions according to the pre-test results and finalize the knowledge test

Pre and post tests consist of 9 true questions and 11 false questions. The pre-test is undertaken prior to the first intensive training program and the post test at the end of Phase 1. Each question is worth 1 point, so the range of the possible score is 0-20. The score is divided into four levels as follows;

Less than 60% or below 12 points	= need improvements
60% to less than 70% or 12-13 points	= fair
70% to less than 80% or 14-15 points	= good
80% and over or 16-20 points	= very good

3.2.2 Client-centered counseling provider attitude checklist

This checklist is a tool to measure attitudes of the nurses and public health staff. Procedures of the development of this attitude test are as follows:

- Literature review
- Consultation with experts
- Checklist development

This test consists of 2 parts and measures attitudes of the nurses and public health staff after undertaking an intensive training workshop and during on-the-job training. The first part includes 15 close-ended questions relating to their opinions about client-centered counseling and the second part has 4 open-ended questions concerning situations when they are on duty to assess their attitudes on client-centered counseling.

Likert scale is used in the first part and each question has 5 levels, from 1 which is “strongly disagree” to 5 as “strongly agree”. The score of negative questions will be reversed prior to the data entry for an analysis. The range of the

possible score is 15 to 75.

The experts and the researcher work together to identify keywords to score the attitude scale of the second part. Each question is valued of 5 scores, so the range of possible score is 0-20. The total score of these 2 parts are converted and defined into five groups as follows:

- 15-30 scores = very poor; need improvements
- 31-46 scores = poor
- 47-62 scores = fair
- 63-78 scores = good
- 79-95 scores = very good

3.2.3 Client-centered counseling skills checklist

This checklist is a tool to measure skills of the nurses and public health staff. Procedures of the development of this skill checklist are as follows:

- Literature review
- Consultation with experts
- Checklist development

The skill checklist consists of 2 parts; the first part is to check current practices of CHCS and the second part is for the expert to assess and give the score for the counselor's performance and ability to help patients find out causes of psychological problems. The checklist will be scored by two experts. It should be noted that items on the checklist may not be all marked as the counseling process depends on the needs of each client. The score range of the checklist is 1-4 and they are defined as follows;

- 1 = Need improvement
- 2 = Fair
- 3 = Good
- 4 = Very good

3.2.4 Guidelines of questions for the focus group discussion to acquire opinions of PCU staff towards the training program to evaluate achievements of this project and seek opportunities to develop the project in the future

- Benefits gained from the training
- Opinions towards the curriculum of the training
- Opinions towards counseling services at PCU

Quality testing of the research tool

A draft questionnaire and guidelines of questions for the focus group are reviewed by three counseling experts for appropriateness of the questions and to check the content validity. After getting feedback from the experts, the researcher revises the questionnaire and questions for the focus group discussion and then conducts a pre-test with 44 public health staff members of a health center in Bann Bueng district of Chonburi province. Next, the researcher has to make another round of the revision before using them to collect the data in this project. The questionnaire on the client-centered counseling knowledge is tested with KR20 (Kuder Richardson) for the content validity and the result yields 0.74. In addition, using the Cronbach's α -coefficient method, the result for the validity of the client-centered counseling provider attitude test is 0.79.

3.3 Procedures of the Research

Phase 1: Preparation (2 months)

1. The researcher conducts an extensive literature review to seek the most appropriate program to improve the capacity of PCU staff as the counselor providing client-centered health counseling services. In the meantime, the researcher consults with health counseling experts (Director of the community health service center region 1 under the supervision of Ministry of Public Health and his team) to plan and develop a training program of the CHC for the PCU staff and invite them to participate in this project as resource people.

2. The researcher, in collaboration with the resource persons, develops a program to build capacity of public health staff working in the targeted PCUs of this project. The training program focuses on client-centered counseling and participatory learning and can be divided into two parts as follows;

- Part 1: Intensive training program (3 days) is organized to provide information about client-centered counseling and the counselor's attitudes in providing this type of counseling.
- Part 2: On-the-job training program (6 months) is implemented to sensitize attitudes and improve skills of PCU staff in providing the client-centered services.

3. The researcher and resource persons discuss and plan the on-the-job training program at PCU (see annex), time duration of the program, evaluation methods and a form to assess knowledge, attitudes and skills of the PCU staff in providing health counseling services.

4. The researcher develops and submits a proposal requesting for financial support from Sirinthorn College of Public Health of Chonburi province and Chonburi hospital (see annex) to absorb expenses of document preparations and materials used in the workshop/training.

5. The researcher coordinates with Chonburi Public Health Office which directly supervises PCUs to grant approval for PCU staff to participate in this project,

Phase 2: Implementation (6 months)

Part 1: Intensive training program (3 days) is a workshop to improve knowledge and attitudes of PCU staff through participatory learning approaches at Chonburi hospital in October, 8-10. This workshop aims to improve knowledge of the PCU staff about client centered health counseling, so they can provide this kind of service at the PCUs. Resource persons/ trainers in this workshop are the director and a staff of Mental Health Center 1, Ministry of Public Health (see the appendix)

The researcher explains a protocol of the client selection to PCU staff (see figure 4) in the last session of Day 3, so they can practice their client-centered counseling skills when they go back to work at their PCU (on-the-job training). The PCU staff members agree with the proposed protocol to select hypertension patients because according to the literature review, hypertension has been ranked the first since 2000 with the highest number of outpatients seeking care and treatments at Chonburi hospital and the number has been annually increasing as shown in table 1 and table 2.

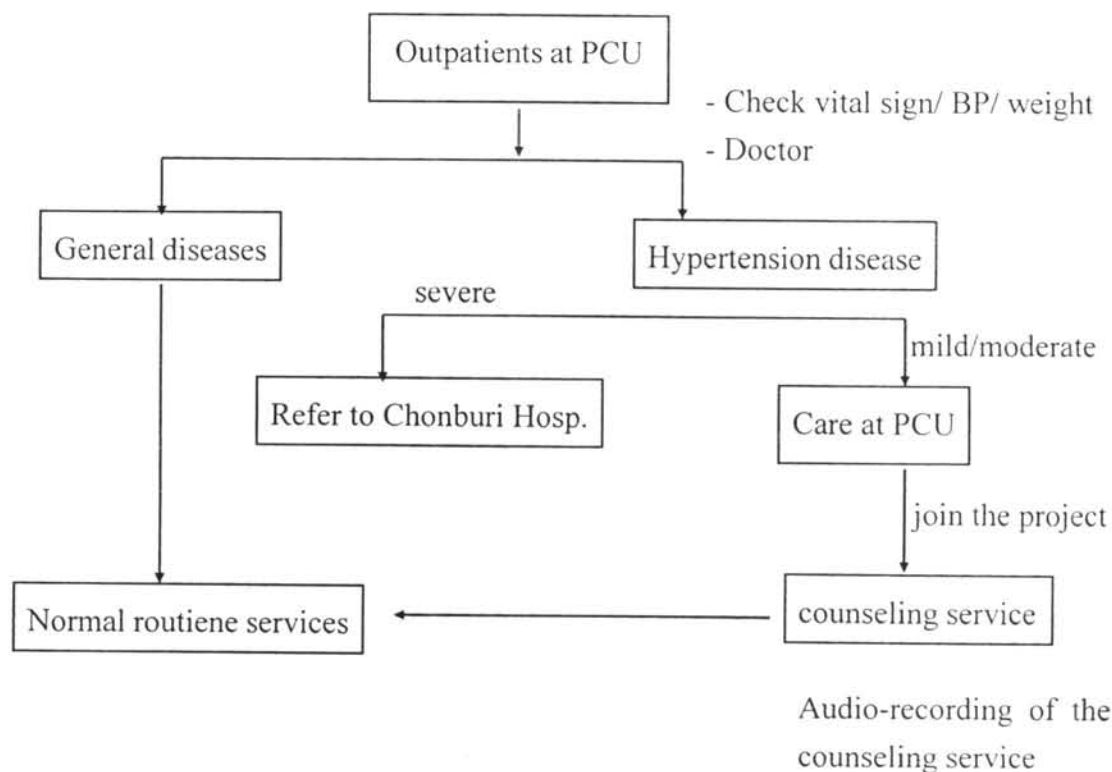


Figure 4: Selection process of outpatients/ clients for the counseling services at PCU

The figure 4 illustrates that all patients who access health services at the PCU have to go through a series of basic check-ups; such as, vital signs, blood pressure, and weight measurement before seeing a doctor. Patients with high blood pressure will be diagnosed of having hypertension disease. They do not have to be transferred to Chonburi hospital for the counseling if they decide to participate in the client-centered health counseling program at the PCU. However, it must be done with consent from the patients that they would like to join the program. Those who decide to receive the counseling at the PCU will have a counseling session with PCU staff who have been trained on the client-centered health counseling program. All of the public health staff in the eleven PCUs will follow the same protocol (see the appendix)

Part 2: On-the-job training program (6 months) is designed to provide opportunities for PCU staff members to practice their counseling skills continuously at the PCU. They still must provide care and treatments to patients as usual but also have to select hypertension patients, following the process as shown in the figure 2. Then, they have to inform the patients about the client-centered health counseling service. The patients will be asked if they like to voluntarily join this project as the client for the client-centered counseling service. The PCU staff must ask for their consent to have the counseling session audio-recorded. The recorded sessions will be used as lessons for discussions to improve their counseling skills through the participatory learning process.

The researcher and the project's resource persons agree to assign each of the PCU staff to conduct client-centered health counseling to 3 hypertension patients for one month. They have to select the best audio-recorded session and submit it in a cassette tape format to the researcher to compile and pass all of their tapes to the resource persons. Next, the resource persons will listen to the tapes and take notes of issues from the recorded counseling sessions. These issues will be used as lessons in workshops which are organized in the first, the third and the sixth month during the 6-month on-the-job training. These three workshops aim to improve their counseling skills continuously as planned in the program's objective. The researcher plans to convene these workshops; each one right after they have submitted their tape, so they are required to have their sessions recorded and submit the tapes three times. The researcher invites the same resource persons to train the PCU staff for continuity. The resource persons have guided and encouraged the participants to discuss if the

counselor uses appropriate skills in a variety of situations and whether it is right or wrong to use such skills and in what situations the counselor can use such skills. PCU staff members will have opportunities to learn about counseling skills through the recorded sessions of other PCU staff. This method will enhance their learning process and the resource persons act as their facilitator. However, schedules of these workshops during the on-the-job training program could not be preceded as planned because of the following reasons;

- Not all of the PCU staff members submit their first tapes within 2 weeks which is the deadline for each period during the on-the-job training. The researcher has to follow-up and extends the deadline for the tape submission for another 2 weeks which results in delays in sending the tapes to the resource persons. After the 2-week extension (1 month in total after the end of the first period for the on-the-job training), the researcher has received only 11 tapes and only 8 of them are of good sound quality (the others are recorded with the high speed system and could not be transcribed; or the counseling session is not recorded in a quiet environment or room, so there are a lot of disturbing noises almost all the times). The researcher consults with the resource persons and both agree to use those 8 tapes for the first workshop and apply the PL approach to improve their counseling skills and encourage them to learn together. The researcher then passes the tapes to the resource persons and starts to make an appointment with the resource persons to reserve their time for the first workshop. Unfortunately, the resource persons have a prior engagement to give a

lecture, so the first workshop is organized on the 26th December with 19 participants.

- After the first workshop, PCU staffs return to work at PCU and continued their on-the-job training program to practice the client-centered health counseling with their old cases in the first period and three additional cases. They are required to submit two tapes; one with an old case and the other is their best session with a new client. These two tapes have to be submitted to the resource persons before the second workshop. Again, the PCU staff could not make it in due course and it causes further delays in the implementation plan and the second workshop has to be postponed to the 30th May, making it 7 months delay after the on-the-job training. In addition, only 6 persons submit their tapes; 3 tapes are of good sound quality and 11 PCU staffs attend the second workshop.

In conclusion, the researcher organizes a series of programs to build capacity of PCU staff and evaluate their knowledge, attitudes and skills in counseling as shown in figure 5.

Intensive Training Program (3 days)		On-the-Job Training Program (7months)	
Day 1	Day 2	Day 81 (Month2)	Day 225(Month7)
K1	K2		
22 persons	22 persons		
	A1	A2	A3
	22 persons	19 persons	11 persons
		S1	S2
		8 persons	3 persons

Figure 5: Program schedule of PCU staff capacity building and knowledge, attitudes and skills evaluation

Because several PCU staff who attend the on-the-job training program fail to submit tapes of their counseling sessions in time and the number of the staff attending workshops tends to reduce at times, the researcher brings up this issue for discussions with the project's resource persons to modify the project's implementation plans. It is agreed that a focus group discussion (FDG) among PCU staff should be convened in June, 15th. To explore their opinions about this project and to evaluate its achievements and seek opportunities to improve the capacity building in counseling services project for PCU staff in the future.

Focus Group Discussion

As some of the PCU staff could not practice counseling skills and fail to submit their counseling session recorded in the audio format in due course, the program schedule is delayed and the researcher, after consulting with the project's resource persons, decides to conduct a focus group discussion with PCU staff who have been recruited to participate in this project in June, 15th at a meeting room of Chonburi hospital. The focus group discussion is organized in order to learn about their opinions towards this project and evaluate its achievements and seek opportunities for the project improvement in the future.

Participants of the focus group discussion are specifically selected from the total number of population in this study (22 people). The researcher picks 11 persons who have registered in the project at the even number; 2, 4, 6, 8...22. These eleven people represent the PCU staff who attend all workshops and submit tapes in due course, those who attend only some workshops and submit some tapes and some participants who have yet to submit a tape. The focus group discussion is conducted to encourage the participants to answer or express their opinions in response to the following three open-ended questions;

- Benefits gained from the training
- Opinions towards the curriculum of the training
- Opinions towards counseling services at PCU

Results of the focus group discussion show that 10 out of 14 PCU staff members who previously worked at Chonburi hospital have already moved back to work in the hospital and two persons are assigned to take up new responsibilities in

the hospital. So, only two persons are still working at the PCU. In addition, two persons out of eight PCU staff members are transferred by their supervisors to other provinces; 2 persons have requested to move to other health centers, leaving 4 staff in this project continue working at the PCU. In total, there are 6 PCU staff who are recruited in this project and continue working at the PCU and 5 out of 6 are uncertain if they could continue their participation in this project and attend a workshop after the third period of the on-the-job training program. As a result, after consulting with the project's resource persons, the researcher has decided to discontinue the capacity building in counseling service to staff in primary care unit project.

3.4 Data Collection

The researcher collects each type of data by the following methods;

3.4.1 Client-centered counseling knowledge test

The researcher conducts pre and post tests of the PCU staff's knowledge on client-centered counseling in the 3-day intensive training program. The pre-test has to be completed by all participants on day 1 prior to the training and the post-test on day 3 after the training.

3.4.2 Client-centered counseling provider attitude test

The researcher evaluates attitudes of PCU staff towards their role as a counseling provider and uses the client-centered counseling provider attitude test two times; the first one on day 3 after the intensive workshop on client-centered counseling or prior to their on-the-job training program at PCU and the second after 2 months of the training at PCU as illustrated in figure 2.

3.4.3 Focus Group Discussion

Since several PCU staff are unable to participate in the on-the-job training counseling program and they fail to submit tape cassettes of their counseling sessions in time, the research has to consult with the project's resource persons to adjust the implementation plan and organize a focus group discussion with PCU staff members who have joined this project in June, 15th at a meeting room of Chonburi hospital.

Focus group discussion method was not planned before the implementation of this research. It is necessary to obtain in-depth information with PCU staff members to learn about their opinions towards this project and evaluate its achievements and seek opportunities for the project improvement in the future.

Half of the total population in this study (11 out of 22 participants) are specifically selected and invited to join the focus group discussion and those are the ones who have registered in the enrolment of the training at the even number; 2, 4, 6, 8...22. These eleven participants in the focus group discussion represent the PCU staff who attended all sessions and submitted tape cassettes in due course and those who occasionally attended sessions and submitted some tapes cassettes or sometimes did not. The researcher conducts the focus group discussion and uses the following three open-ended questions as follows;

- Benefits gained from the training
- Opinions towards the curriculum of the training
- Opinions towards counseling services at PCU

This focus group discussion had been conducted by the researcher. The discussion started with the objectives of the discussion and to get permission to use tape record. The participants were encouraged by the moderator to express their opinions about the project with the general and the three open-ended questions as plan.

One academic of education, working at the Social Medicine department was a note taker for this group discussion who recorded all the content of the discussion. She assisted the moderator in missed topic discuss. She took note by giving the number to the each participant for easy to remember when she will be in discussion.

A nurse in the Social Medicine department assisted to capture all information during the focus group discussion.

3.5 Data Analysis

For this study, data management and results of all quantitative analyses will be processed with the Statistic Package for Social Science (SPSS) version 10.0 for Window. Descriptive analysis will be conducted using frequencies, means and standard deviations.

In addition, qualitative analysis (content analysis) was used in this study with the data from focus group discussion. This analysis use word frequency counts to identify words of potential interest, and then a keyword in context or pull up the sentence in which that word was used therefore he or she can see the word in the some context. This procedure can help to strengthen the validity of the inferences that are being made from the data.