

# CHAPTET III

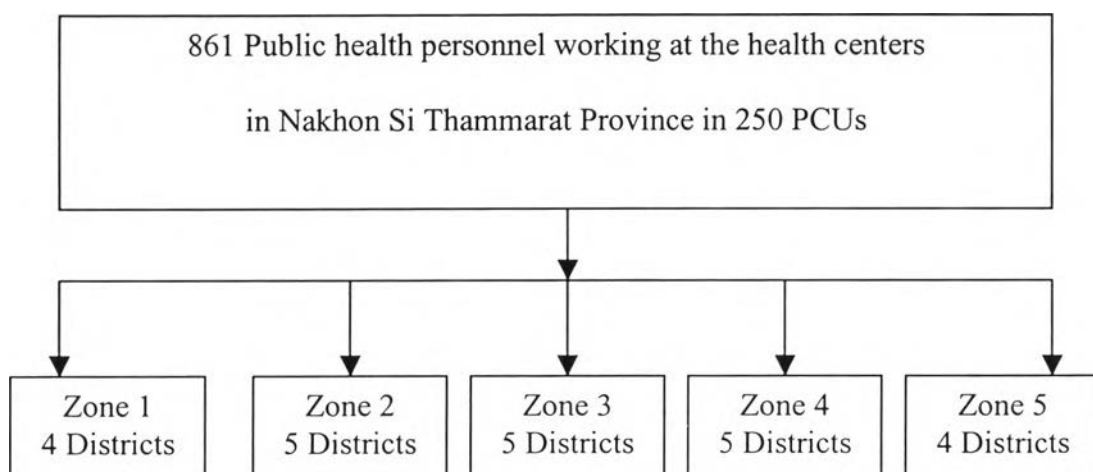
## RESEARCH METHODOLOGY

### Research Design

This study was a cross-sectional descriptive research.

### Study Population

The studied population were the health personnel working at all government primary health care units in Nakhon Si Thammarat Province which composed of physicians, dentists, pharmacologists, professional nurse, technician nurses, public health officers, public health administrative staff, and community public health staff. There were all together 861 persons in 250 primary care units (Nakhon Si Thammarat Public Health Office, 2002).



## **Study Unit**

The study units of this research project are the staff of the primary care units in Nakhon Si Thammarat Province.

## **Observation and Measurement**

- Independent Variables

1. General information about the public health personnel e.g. age, sex, marital status, education level, years of government service, classification, position, years of working with PCU, type of work, roles/responsibilities, ever been trained.
2. General information of the primary care unit which composed of types of the PCU, model, number of personnel, and number of population responsible for.

- Dependent Variables

The data regarding the assessment of the health services provided as related to perceived significance and actual practices of the public health personnel working at PCUs which composed of 10 activities : family and community survey ; registration & screening; main services; counseling; exit care; referring & home-visit; planning & ongoing activities; community activities; PCU management; and supervision, follow-up and evaluation.

## **Duration of the Study**

November 2003 - March 2004

## Research Instruments

1. General information of PCU from Nakhon Si Thammarat Public Health Office.
2. Questionnaire development by the researcher based on the review of literature regarding the guideline for implementing activities of quality health services of the primary care unit <sup>(19)</sup> and the service of related researches, which covered the contents and research objectives. The questionnaire was disorder into 3 parts as follow :

Past 1 : General information. This past was composed of 15 questions, using check-list and completion types of the question.

Past 2 : Opinions of the public health personnel working at the PCU regarding perceived significance of service activities and the actual practices. This part composed of 65 statements. One-to five rating scales were used by applying the Likert's method. The following scoring system was used:

	Level of significance	Level of Actual Practice Score
Most	5	5
More	4	4
Somewhat	3	3
Less	2	2
Least	1	1

The Criteria for Classifying the level of Perceived Significance and Actual Practices

From the score of each statement, the arithmetic mean was used to group the levels of significance and the actual practices, as follows:

Mean Score	Level
4.21-5.00	Most
3.41-4.20	More
2.61-3.40	Somewhat
1.81-2.60	Less
1.00-1.80	Least

Past 3 : Opinions and recommendations. This part was concerned with problems/obstacles and recommendations in providing health services, composed of 6 opened questions

### **Instruments' Validity & Reliability**

1. The content validity of the questionnaire was checked by 5 experts and their advisor including checking the appropriateness of the language used in every question. Revision was then followed.
2. For the reliability of the instrument, the revised questionnaire was tried-out with 30 public health personnel who had the same characteristics of the sample. Revision was made after pretesting and Cronbach's Coefficient alpha <sup>(26)</sup> was computed for the instrument's reliability testing.

The reliability value of each part of the questionnaire was found high, as follow:

Health Services Activities Provided at PCU	Cronbach's Coefficient Alpha	
	Perceived Significance	Actual Practices
1.Family and Community survey	0.8848	0.8895
2.Registration/screening	0.8273	0.7394
3.Main services	0.8799	0.8493
4.Counseling	0.8370	0.7605
5. Exit care	0.7943	0.7346
6. Referring/ home-visit	0.8902	0.8845
7. Planning and ongoing activities	0.8796	0.8592
8. Community activities	0.9544	0.9390
9. PCU management	0.9619	0.9489
10.Supervision/follow-up/evaluation	0.9493	0.9615
<b>ToTal</b>	<b>0.9821</b>	<b>0.9743</b>

### Data Collection

1. Submitting the official letter of the Provincial Public Health Office to all District Health Centers in Nakhon Si Thammarat Province in order to inform the study's objectives, and to get permission and cooperation.
2. Sending the questionnaire to all District Health Centers by herself and the heads of all PCUs in each district were asked to managed data collection from all health personnel working at each PCU.

3. After the questionnaires have been sent to all District Health Centers for 2 weeks, the researcher coordinated with all District Health Centers to collect the questionnaires were checked for completeness and quality.
4. Following-up was made by telephoning the District health Centers where all questionnaires have not received and sent more copies in case that some were lost.
5. Some colleagues and classmates were asked to check and coordinate with District Health officers in order to get the questionnaires back.
6. Completeness and quality of the returned questionnaires were checked.

## **Data Analysis**

The data were coded accordingly with the coding instruction. The analysis were made by using the programmed SPSS For windows and Microsoft Excel. The following statistics were computed:

1. Descriptive Statistics <sup>(27,28)</sup>
  - 1.1 Personal characteristics regarding gender, age, marital status, education level, year of government services, position, classification, year of working at PCU, job characteristics, roles/responsibilities and training attended were analyzed by computing frequency, arithmetic means, percentage, and standard deviation.
  - 1.2 Characteristics of the PCU regarding type of PCU, model, number of personnel and number of population responsible for were analyzed by computing frequency, percentage, arithmetic means, and standard deviation.

1.3 Data regarding 10 items of perceived significance and actual practices of health services were analyzed by computing frequency, percentage and arithmetic means.

## 2. Inferential Statistics <sup>(27,28)</sup>

2.1 The difference comparison between the total mean score of perceived significance and actual practices was analyzed by firstly applying Kolmogorov-Smirnov Test (K-S) to test for normal distribution and then paired t-test was employed.

2.2 The difference comparisons between the mean score of perceived significance and actual practice of activities by activity, as related to personal characteristics and PCU characteristics were analyzed by computing the following statistics:

t-test for the independent variables with 2 categories

One-Way ANOVA for the independent variables with more than 2 categories