

## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

In this chapter, the design and methods used in this study are discussed in seven sections: research design, population and sample, research instruments, data collection, data analysis, work plan and time schedule, and budget respectively.

#### **1. Research Design**

This study is evaluation research.

#### **2. Population and Sample Sizes**

The population of this study was three groups of officers involving in the management or operation to check the stakeholder triangle. Those three groups were:

1. The Director of the Namphong District Health Cooperative Committee
2. The Data Collection Team which consists of 8 persons appointed by the director of the Namphong District Health Cooperative Committee to collect data important to fund allocation of the district projects in 1999
3. 44 Health personnel of 16 Health Centers in Namphong District: All personnel included in this study were to those who had more than 6 months of work experiences in Namphong District. The data could be collected from all of them as shown in Table 1.

**Table 1 Number of Respondents separated by Health Centers**

Health Center	Number of Staff (Persons)
1. Koke Yai, Tambon Bua-ngern	2
2. Bua Ngern	3
3. Pang Tui	3
4. Norng Wa, Tambon Sai Moon	2
5. Baansri Prasert, Tambon Wang Chai	4
6. Baan Khaam	3
7. Laoyai	3
8. Buayai	4
9. Ta Kraserm	3
10. Sai Moon	2
11. Muang Wan	2
12. Kood Nam Sai	3
13. Nam Phong	3
14. Sa Ard	3
15. Norng Koong	2
16. Pan Namjai	2
<b>Total</b>	<b>44</b>

### 3. Research Instruments

In order to obtain all needed information according to objectives of the study, the researcher set many methods in collecting data. The methods used were 1) Indepth Interview, 2) Focus Group, 3) Questionnaire for Health personnel, and 4) relevant records and reports review. The researcher created 3 sets of instruments including 1) Indepth Interview Guideline for the Director of Namphong District Cooperative Committee, 2) Focus Group Guideline for Data Collection Team, and 3) Questionnaire for Health personnel. Each instrument was discussed below.

### **3.1 The Construction of the Instruments**

The researcher constructed the instruments by reviewing related literature, conceptual framework, and research objectives. Then, the indicators were designed and the instrumented were created to collect data. Consequently, the instruments were revised and improved in consultations with research advisors and experts respectively.

### **3.2 Details of Each Instrument**

**3.2.1 Indepth Interview Guideline for the Director of Namphong District Health Cooperative Committee** was used for interviewing the Director of Namphong District Health Cooperative Committee about the three dimensions: planning to create organization efficiency, management controlling for promoting organization efficiency, and policy awareness and understanding in the four following activities:

- 1.) Model and Criteria of Fund Allocation to Health Care System
- 2.) Medical Record Audit and Health Service Review
- 3.) Health Card Information System
- 4.) Development of Network and Quality of Primary Care Service

Questions included in this interview were, for example, What is your policy? What is the project design? What are the criteria in fund allocations? What are your roles in project management? How do you control the project operations? And how do you support the project?

**3.2.2 Focus Group Guideline for the Data Collection Team** was used for group discussion of the Data Collection Team. It also involved with the three dimensions: planning to create organization efficiency, management controlling to Create Organization efficiency, and policy awareness and understanding in the four following activities:

- 1.) Model and Criteria of Payment for Health Care System
- 2.) Medical Record Audit and Health Service Review
- 3.) Health Card Information System
- 4.) Development of Network and Quality of Primary Care Service

The guideline questions were as follow. What are the roles of the committee? How is policy put into practice? How do the criteria of fund allocation change? What are the results of the committee work in terms of data collection, audit, punishment, and fund allocation?

**3.2.3 Questionnaire for Health Personnel** was used to survey their operations in the Development of Health Card Fund Allocation Project for Health Centers: Case Study in Namphong Health Center. The questionnaire was divided into 2 parts.

**Part 1: Profile of Sample Group**, It is composed of general information of respondents such as sex, age, marriage status, education level, workplace, work position, work experiences concerning Health Card, and work duration in Namphong District.

**Part 2: Questions regarding Health Personnel' awareness and practice** in the Development of Health Card Fund Allocation Project. Questions are classified into 3 following topics.

**1. Policy Awareness and Understanding**: The questions included in this topic are about policy acceptance, policy participation, and how the personnel benefit from the project.

**2. Planning to Create Organization Efficiency**, related to 4 activities:

*-Model and criteria of fund allocation to Health Care System* includes such questions as:

- Do you agree with the model and criteria of fund allocation to Health Care System? Why or why not?
- At the Health Center, is anyone assigned to be taking part in setting the model and criteria?
- Do Health Personnel take part in setting the model and criteria?
- Are there plans in fund allocation of the district?
- Do you think that fund allocation appropriate?

*-Medical record audit and health service review*

- Do you think it is necessary to have medical record audit and health service review?
- Are there assignments in checking the reliability and correctness of medical record and health service in levels of district and zone?
- Is there review of health service used in fund allocation to see if it is appropriate and serving the project objectives?

- Is there analysis to find out whether the new fund allocation, aiming to motivate Health Center personnel in providing service to people, efficient or not?
- Do you have any problems or recommendations concerning this project?

***-Health card information system, involving with news and acknowledgement***

- Are there assignments in Health card information system in the Health Centers or district level? How?
- Are there information system developments and database audit systems in district level?
- Do you think that the present information system suitable to practice?
- How is the control in the Health Centers and the district level?
- Is there any evaluation of service for Health Card holders?

***-Development of Primary Care Service network and quality***

- Do you think the development of Primary Care Service network and quality is essential?
- Does the District Health Cooperative Committee have any plans or projects to develop the service quality of Health Centers.
- Are there any conferences to inform the personnel about Health Center's network development?
- Are there assignments or setting up of policy concerning network and quality development in Health Centers?
- Are there supports from the District Health Cooperative Committee for network and quality development in Health Centers?
- Are there pre-evaluation and post-evaluation of network and quality development in Health Centers?
- Do personnel face any problems in health promotion, prevention, and cure?

**3. Management to Create Organization efficiency includes such questions as:**

- Is there a sufficiency of personnel in your Health Center?

- How staff's ability in terms of model and criteria of fund allocation to Health Care System, health card information system, medical record audit and health service review, and development of network and quality of primary health care service is enhanced through training or studying?
- Is there a sufficiency of budget in administration?
- Is there a sufficiency of space and materials?
- Is there a sufficiency of tools and equipment?
- What do you think must be improved such as methods, technology, administration, and communication?
- Are there any existing resources that have not been used? Please identify.

The questions are mixtures between close-end and open-end. That means each question is composed of two choices. Each choice provides space for the respondent to add their reasons or opinions. In each of the questions, there is no right or wrong answer. It aims to survey the personnel' opinions and supporting reasons.

### **3.3 Validity Test**

To test the validity of instruments, the researcher consulted with the advisors to ask for agreement on construct validity, content validity, format, and wording. Then, the instruments were improved to meet the objectives.

The questionnaire was tried out with 4 health officers from Koke Soong Health Center and Baan Dong Health Center in Ubonrattana District on April 11, 2000. The reason why the research chose those two health centers was that they had the nearest model of health card fund allocation with those in Namphong District. The try out was carried out in order to improve wording, structure, and pattern of the questionnaire. The completely revised questionnaire was used with the sample group afterwards.

## **4. Data Collection Methods**

### **4.1 Indepth Interview with the Director of the Namphong District Health Cooperative Committee**

The instrument used was Questionnaire Guideline for Indepth Interview the Director of Namphong District Health Cooperative Committee developed by the researcher.

As an interviewer, the researcher conducted a walk-in interview with the hospital director at Namphong Hospital on April 11, 2000. However due to his work, the director could not be interviewed during the daytime. Therefore, the appointment had to be postponed to 18.00 – 20.00 hours. As that time was suitable for dinner and that the research would like to create a relaxing atmosphere, the interview was done during the dinner. A coordinator from the Ministry of Public Health also joined in the dinner and interview. Everything went on well.

The researcher made a tape-recording of that interview. After the interview, the researcher asked to leave. On the next day, the researcher concluded the conversation according to topics and explained it from the recording.

### **4.2 The Focus Group Discussion**

The sample group was the Data Collection Team of 8 officers. There were also 4 representatives of Health Centers who worked in Family Medical Plan. The total number was 12 persons. The conference was facilitated by Mr. Wutthipong Pakdeekoon, a Health Technician, who appointed date and time with the members and chose the conference room of Namphong District Health Office, which was not noisy, to perform the discussion.

To arrange the group discussion, when all the members arrived, District Health Office Director as the host had a welcome speech and opened the discussion. The researcher, who was the moderator of the discussion, introduced herself and explained the objectives of group discussion to members. Then, the researcher asked the members to introduce themselves in order to create a good relationship between each other. Before starting the discussion, the researcher asked for permission to make a tape-recording to collect all needed information of the discussion. The researcher asked the members to look at the fact about the project. Before concluding the answer, the moderator asked for members' opinions and got very good cooperation. The discussion was done on 11 April 2000 and took 4 hours from 13.00-17.00 hours.

**4.3 Questionnaire for Health Personnel** to evaluate the awareness and practice of health personnel. The procedure of data collection was discussed step by step as follow.

**4.3.1** The researcher went to Namphong District Health Office for the monthly conference on 5 April 2000 in order to give out the questionnaire to heads of Health Centers and ask for help with giving out the questionnaire to Health Center personnel. Then, the researcher appointed date and time to collect data at each Health Center.

**4.3.2** The researcher collected data at Health Centers during 24 April 2000 – 30 May 2000. The researcher checked the questionnaire and asked for additional information in case the questions were not answered completely.

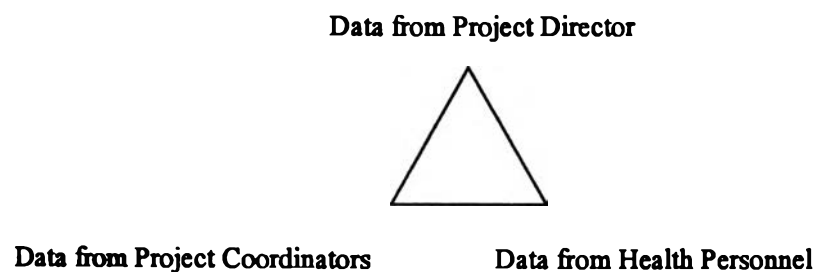
**4.3.3** The researcher also collected data from secondary sources such as monthly conference report, project report, activity report, and notice of the District Health Cooperative Committee.

## **5. Data Analysis** including data screening and data analysis

### **5.1 Data Screening**

After obtaining data, it was very important to screen and analyze it. Data had to be screened for its validity and reliability. This research made use of Data Triangulation to prevent any mistakes. This meant if the data provider changed, would the data remain the same? This research employed three groups of data providers: administrator, coordinators, and operation officers.

**Figure 4 Data Triangulation**





## **5.2 Data Analysis**

The researcher analyzed data obtained from three groups of sample as well as those from documents.

**5.2.1 Data obtained from Indepth Interview with the Director of Namphong District Cooperative Committee:** The data were analyzed in Description and Induction. To see all perspectives, firstly the researcher used Description to describe the details of the general situations of the project. The information provided was about plan and characteristics of the project. Such information was necessary to help readers to have more understanding about its fact or phenomenon. Moreover, it enabled readers to examine the information themselves. In term of qualitative analysis, the data had to be interpreted to create the Induction, which was very important. This method was to summarize many concrete trifling data into an abstract conclusion by considering the common characteristics found. In qualitative research, inductive analysis was more preferable than statistic one.

**5.2.2 Data obtained from Focus Group:** Content analysis and typological analysis were used in analyzing the data.

**5.2.3 Data obtained from Questionnaire:** The 44 questionnaires were gathered from Health Personnel. The researcher, then, checked for their correctness and completeness before analyzing them as follow.

-*Quantitative data* were analyzed and interpreted statistically for Percentage, Mean, Median, Standard Deviation (S.D.), Range, and Frequency of Interval.

-*Qualitative data* were performed by content analysis.

**5.2.4 Data obtained from Documents:** Contest analysis was used to analyze the data.

### **Summary of Data Analysis**

The researcher used various methods where appropriate in analyzing the data obtained from 4 sources. After that, related data were classified into groups to make the conclusion. Data to be taken into account were those meaningful and related.

**6. Work Plan and Time Schedule** This research study was conducted during September 1999 – September 2000. Details were shown in Table 2.



## 7. Budget

1. Remunerations		
1.1 Instrument construction and tryout	6,000	baht
1.2 Forty-six persons to be interviewed	1,380	baht
1.3 Data Analysis	5,000	baht
1.4 Report Typing	2,000	baht
1.5 Researcher Assistant	2,000	baht
1.6 Driver	1,000	baht
2. Material		
2.1 Duplicating Papers	1,000	baht
2.2 Laser Printer Ink	3,000	baht
2.3 Recordable Cassettes	1,250	baht
3. Miscellaneous		
3.1 Fuel	2,000	baht
3.2 Photocopy	1,000	baht
3.3 Report Binding	3,000	baht
3.4 Focus Group Arrangement	<u>2,000</u>	baht
Total	<u>30,630</u>	baht