### **CHAPTER III**

### **RESEARCH METHODOLOGY**

#### **RESEARCH DESIGN**

This research is a cross-sectional, descriptive study, with the aim to measure levels of perception of patients' rights and their practices by HCWs and patients at Bamrasnaradura Institute.

#### TARGET POPULATION

Population in this study comprise of two groups: HCWs at BI and patients registered at BI during 20 January – 20 February 2004.

### Group 1 Health care workers:

All HCWs are the hospital staff who give service to patients. Laboratory department personnel, workers in pharmacy department and administrative staffs (clerical department and financial department) who do not have direct service to patients, were excluded from sample frame. Therefore, a total of population in HCWs was 379.

## **Group 2 Patients:**

All patients who visited the Outpatient Department at BI during January 20 through February 20, 2004. The total number of patients who registered at BI in 2002 was 232,322 consisting of 13,638 inpatients and 218,684 outpatients. This study aims at outpatients because most inpatients at the BI are severe HIV/AIDS, and therefore they require more time and possibly different data collection tool.

#### Sample size:

The statistical formula Taro Yamane was used to calculate the sample size (Yamane, 1967). From this formula, the estimated population was 379 HCWs, which comprised of 43 medical doctors, 151 registered nurses, 72 technical nurses and 110

nurse aides. The estimated population of patients was 218,684 patients. The number of sample size was as follows;

$$n = N$$

$$\frac{1 + (Ne^2)}{1 + (Ne^2)}$$

where n = the desired sample size

N = the estimated population

e = the level of precision or relative error of estimation equal .05

Using this formula, the sample size would be as follow:

$$n_1 = 379 = 195 \text{ cases}$$
  
 $1 + (379 \times 0.0025)$ 

$$n_2 = 218,684 = 399 \text{ cases}$$
  
 $1 + (218,684 \times 0.0025)$ 

Where  $n_1$  = The number of sample size of health care workers

 $n_2$  = The number of sample size of patients

The 195 health care workers and 400 of patients were enrolled in this study.

## Sampling technique:

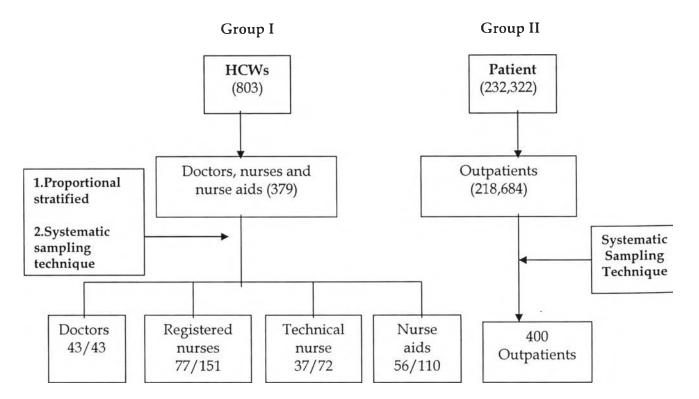
Group I HCWs: In this study, total number of 43 medical doctors was perfect sampling, as the number was not too high. More importantly, they have got a major role in the patients' rights.

As for registered nurses, technical nurses, and nurse aids, proportional stratified sampling technique was used as follows:

Nurse aids = 
$$\frac{110 \times 195}{379}$$
 = 56  
Registered nurses =  $\frac{151 \times 195}{379}$  = 77  
Technical nurses =  $\frac{72 \times 195}{379}$  = 37

For the probability sampling, that is systematic random sampling, cases were selected one in every 10<sup>th</sup> patients who registered at OPD of the BI during January 20 - February 20, 2004. After that researcher explained and gave questionnaire to them.

## Sampling scheme



#### **Inclusion Criteria:**

#### For HCWs:

- 1. Being medical doctors, nurses and nurse aides at BI during January 20 through February 20, 2004.
- 2. Willing to cooperate in this study.

#### For Patients

- 1. Ability to read and write.
- 2. Willing to cooperate in this study.

Exclusion Criteria: Subjects with severe illness.

Observation and Outcome Measurements: The main aim was to measure the level of perception of patients' rights and level of patients' rights practices at BI. These outcome variables could influence directly or indirectly other variables.

#### Limitations

- This research was to study perception of patients' rights toward the Declaration of Patients' Rights in Thailand, which was proclaimed on April 16,1998.
- 2. The subjects were HCWs and patients at BI during January 20- February 20, 2004. The subjects were representatives of HCWs and patients enrolled at that time. It may not be a representation of all HCWs and patients over time.
- 3. Personal trait variables were not taken into consideration in this study.
- 4. Reseacher did not observe their practices.

### **Research Instruments**

Research instruments used self-administered structured questionnaire to collect data. The questionnaire was on the Declaration of Patients' Rights in Thailand. This questionnaire with combination of close and open-ended questions were developed

from literature review and opinion from three experts. This study consisted of two type questionnaires for HCWs and patients.

### Domains of Questionnaire:

# Questionnaire I: For HCWs comprises of 4 components as follows:

Section I Socio demographic characteristics: There were ten questions concerning age, gender, education level, work position, marital status, work experience, work department, moral training or patients' rights training.

Section II Perception of patients' rights: There are ten items concerning the Declaration of Patients' Rights in Thailand, 1998 with nineteen questions in all, details as follow:

Questions 1-2 on item 1 that every patient has the basic right to receive health service as have been legally enacted in the Thai Constitution 1997.

Questions 3-5 on item 2 that the patient is entitled to receive full medical services regardless of their status, race nationality, religion, social standing, sex, age and the nature of their illness from their medical practitioner.

Questions 6-8 on item 3 that patients who seek medical services have the rights to receive their complete current information in order to thoroughly understand about their illness. Furthermore, the patients can either voluntarily consent or refuse treatment from the medical practitioner treating him/her except in case of emergency or life threatening situation.

Question 9 on item 4 that patient at risk, in critical condition or near death, are entitled to receive urgent and immediate relief from their medical practitioner as necessary, regardless of whether the patient requests assistance or not.

Question 10 on item 5 that the patient has the right to know the name-surname and the specifics of the practitioner under whose care he/she is in.

Questions 11-12 on item 6 that the right of patient to request a second opinion from other medical practitioner or other specialist who is not involved in the immediate

32

care of him/her as well as the right to change the place of medical service or

treatment, as requested by the patient, without any prejudice.

Question 13 on item 7 that the patient has the right to expect that personal

information are kept confidential by the medical practitioner, the only exception

being in cases with the consent of the patient or due to legal obligation.

Questions 14-15 on item 8 that the patient is entitled to demand complete current

information regarding his role in research and the risks involved, in order to make

decision to participate in/or withdraw from the medical research being carried out

by their health care provider.

Questions 16-17 on item 9 that the patients have the rights to know or demand full

and current information about their medical treatment as appeared in the medical

records, as requested. With respect to this, the information obtained must not

infringe upon other individuals' rights.

Questions 18-19 on item 10 that the guardians or legal representatives may use their

rights in place of persons under the age of eighteen or who are physically or mentally

handicapped wherein they could not exercise their own rights.

Section III Patients' rights practices: There were twenty questions concerning the

Declaration of Patients' Rights in Thailand, 1998 as follows:

Questions 1-2 on item 1

Questions 3-5 on item 2

Questions 6-8, 12 on item 3

Question 9 on item 4

Question 10 on item 5

Question 11 on item 6

Question 13 on item 7

Questions 14-16 on item 8

Questions 17-18 on item 9

Questions 19-20 on item 10

**Section IV** The recommendations or suggestions on any associated problems or obstructions that the sampling groups encountered.

Questionnaire II For patients comprises of 4 components as follow;

**Section I Socio demographic characteristics:** There are ten questions including age, gender, education level, occupation, family income, marital status, and number of OPD visits.

## Section II Perception of patients' rights

Questions 1-2 on item 1

Questions 3-5 on item 2

Questions 6-8 on item 3

Question 9 on item 4

Question 10 on item 5

Questions 11-12 on item 6

Question 13 on item 7

Questions 14-15 on item 8

Questions 16-17 on item 9

Questions 19-20 on item 10

**Section III Patients' rights practices:** Questions about patients' rights practices that patients receive when they visit the institute.

Questions 1-3 on item 1

Question 2 on item 2

Questions 5-7 on item 3

Question 8 on item 4

Question 9 on item 5

Question 10 on item 6

Question 11 on item 7

Questions 12-13 on item 8

Question 14 on item 9

Questions15-16 on item 10

**Section IV** The recommendations or suggestions on any associated problems or obstructions that the sampling groups encountered.

## Questionnaire Constructions and Measurement Method (Designing the scale)

The measurement methods for each variable are as follows:

**Table 3.1** Questionnaire constructions and measurement method for patients. (Designing the scale)

Questionnaire Constructions	Variables/ Name	Level (Scale)	Value
Independent Variables Section I Socio- demographic	1.Age	Ratio	In years
	2.Sex	Nominal	1.Male 2. Female
	3.Marital status	Nominal	1.Single 2.Married
			3.Widowed/separated/divorced
	4.Occupation	Nominal	1.Unemployed 2.Student
			3.Government official/State- enterprise 4.Private business
			5.Company's employee

**Table 3.1** (cont.) Questionnaire constructions and measurement method for patients. (Designing the scale)

Questionnaire Constructions	Variables/Name	Level (Scale)	Value
			6.Farmer
			7.Others (housewife, trade)
	5. Education level	Ordinal	1.None 2.Grade 4
			3.Grade 6
			4.Grade 9 5.Grade 12
			6.Certificate / Diploma
			7.Bachelor's degree
			8.Master's degree 9.Others
	6. Income	Ratio	Per month (Baht/month)
	7.Department of	Nominal	1.Obstetric-Gynecology
	received service		2.Surgery 3.Medicine
			4.Pediatric 5. Eye, ENT
			7.Others
	8.Experience of knowing about patients' rights	Nominal	1.Never 2.Ever
	9.Which source of	Nominal	1.Mass media
	knowledge about patients' rights		2.Copy of Patients' rights at Hospital 3.Colleage
	that received		4.Seminar / Meeting
			5.Other
	10.Number of	Ordinal	1.One time (first visit)
	OPD visit		2.Two time
Dependent Variables			3.Three time or more
			1.Strongly disagree
Section II perception of patients' rights	Perception of patients' rights	Ordinal	2.Disagree
			3.Agree
			4.Strongly agree
Section III	Experience of received practoces patients' rights	Ordinal	0 No experienced
Patients' rights			1.Never
practices			2.Seldom
			3.Somtime
			4.Often

**Table 3.2** Questionnaire constructions and measurement method for health care worker (Designing the scale)

Questionnaire Constructions	Variables/Name	Level (Scale)	Value
Independent Variables	1.Age	Ratio	In years
	2.Sex	Nominal	1.Male 2. Female
Section I Socio- demographic	3.Marital status	Nominal	1.Single 2.Married
			3.Widowed/separated/divorced
	4.Work position	Nominal	1.Doctor 2. Registered nurse
			3.Technical nurse 4.Nurse aid
	5.Education level	Ordinal	1.Grade 9 or less than
			2Grade 12
			3.Certificate / Diploma
			4.Bachelor's degree
			5.Master's degree 6.Others
	6.Work of department	Nominal	1.Obstetric-gynecology
			2.Surgery 3.Medicine
			4.Pediatric 5.Other
	7.Work experience	Ratio	In years
	8.Experience of perceived knowledge of patients' rights	Nominal	1.Never 2. Ever
	9. Which source that received that knowledge of patients' rights	Nominal	1.Copy of patients' rights at hospital
			2.Colleague
			3.Learning in professional course
			4.Seminar or training
Dependent			5 Individual 6. Others
	10. Experience of moral training or code of professional	Nominal	1.No 2. Yes
Variables	training		
Section II	Perception of patients' rights	Ordinal	1.Strongly disagree
perception of			2.Disagree
patients' rights			3.Agree
			4.Strongly agree

**Table 3.2** (cont.) Questionnaire constructions and measurement method for health care worker (Designing the scale)

Questionnaire Constructions	Variables/ Name	Level (Scale)	Value
Section III Patients' rights practices	How often do you do activities toward patients' rights?	Ordinal	0 No experienced
			1.Never
			2.Seldom
			3.Somtime
			4.Often

## Quality of the questionnaire instrument

## Validity Test:

Measurement of the content and construct validity referred to the validation of the study. After literature review, the investigator developed all possible questions needed for this study. Then, the questionnaires were sent to experts to check the feasibility and relevance of the questionnaire. The experts comprised of two medical doctors and one nurse supervisor.

## **Reliability Test:**

Reliability is on the accuracy, dependability, stability, consistency, predictability and reproducibility of a measuring instrument. Internal consistency of rating scale was done by Cronbach's alpha coefficient. There were 20 HCWs and 20 patients at Bangkruay Hospital, Nonthaburi Province who served as subjects for reliability test. This hospital was selected, as it was comparable to the BI. The score of this reliability test for 39 items of perception and practices of patients' rights by HCWs was 0.81, and for 35 items by patients was 0.83. As the reliability coefficient is more than 0.8, the items are highly reliable and acceptable.

## **DATA COLLECTION**

The researcher distributed the self-administered structured questionnaire by herself. The time of data collection was between 08.00 am and 15.00 pm. The investigator

was responsible for the overall management of the study. To maintain the quality of data collection, different procedures were adopted, such as pre code forms, several levels of data editing before data coding, and consultation with advisor and coadvisor. Data was collected until the desired number of samples agreeable to the simple random sampling were received.

### **Informed Consent and Confidentiality**

An official letter was sent from the College of Public Health to Bangrouy Hospital and the BI seeking their prior approval to conduct a survey in these two settings. Research committee of BI reviewed the thesis proposal for ethical considerations. Then, after they considered and allowed the researcher to conduct a survey, the study was initiated by briefing of participants to ensure their confidentiality. Consent was given by each respondent before distributing the questionnaire. The privacy, identity and confidentiality were assured to the respondents to be maintained with anonymity in the questionnaire. The researcher promised to protect the confidentiality of performance data, which were given in the context of academic supervision. And the researcher ensured that accessibility to confidentiality information was restricted.

### STATISTICAL ANALYSIS

After the data was collected, the next process was data entry that involved the conversion of raw source material to a useable data file in a form of data analysis. The variables were defined and coded to facilitate cleaning by using the statistical package named SPSS 10.0. Then through analysis, interpretation of statistical results was done. The statistical analyses of this study were as follow:

#### 1. Descriptive statistics

- 1.1 To organize and describe the characteristics of data, such as the demographic by frequency, mean, standard deviation and percentage.
- 1.2 To use mean and standard deviation of score perception of patients' rights and patients' rights practice.

1.3 Divided the level of the perception of patients' rights and patients' rights practices were turned into 3 levels. Additional to Dunn and Clark (2001) mentioned the range was defined to be the difference between maximum and minimum observation and then divided with number of classes. The size of level was interpreted as follow:

Number of classes

1.00-2.00 means the low of perception or practice.

2.01-3.00 means the moderate of perception or practice.

3.01-4.00 means the high of perception or practice.

In this level using mean and standard deviation.

#### 2. Inferential statistics

Chi-square was used for following purpose:

- 2.1 The association between perception of patients' rights and patients' rights practices.
- 2.2 The comparative level of perception patients' rights among group of HCWs and patients.