CHAPTER 3

METHODOLOGY

In this chapter, the research design, setting, samples, and the instruments were described. The data collection procedures and data analysis, method were presented.

The design of the study

A descriptive-correlational design was used in this study to identify the needs of postmastectomy patients, and to investigate the relationships between needs and age, and needs and family relationship of postmastectomy patients at 3rd day and 7th day after surgery. The data was collected from December 2nd, 1995 to February 16th, 1996.

Subjects

The target population of this study was the Chinese postmastectomy patients who were admitted in the two general surgical units at first teaching hospital of West China University of Medical Sciences in Chengdu, Sichuan Province, China. With the approaching of the Spring Festival, the most important festival in China, there was a sharp decreasing in numbers of patients in the February, so the investigator could

not get enough subjects proposed (N=50) within the limited time period. Using purposive sampling techniques, 48 subjects were selected with the following criteria: (1) postmastectomy women aged 30 to 70; (2) no evidences of wide-spread metastasis; (3) can understand and speak Chinese; (4) be aware of the breast cancer diagnosis; (5) be mentally able to participate in the study.

Instrumentation

The instrument used in this study was the interview form which was divided into three parts:

Part I. Demographic data: It consisted of the information about age, marital status, occupational background, educational level, religious belief, average family income, posses of government support medical care, stage of breast cancer and type of surgery (Appendix A).

Part II. Need Assessment Scale (NAS): It is a self report rating scale modified from Lilley's Human Need Assessment Scale (HNAS) to assess the level of significance of needs perceived by subjects. It consisted of 65 human needs divided into five aspects of needs, which included physical needs, safety needs, belonging and love needs, esteem needs, and self-actualization needs. The physical needs scale consisted of seventeen items of needs. The safety needs scale consisted of 20 items of needs. The belonging and love needs

scale consisted of 12 items of needs. The esteem needs scale consisted of 10 items of needs. The self-actualization needs scale consisted of 6 items of needs. Subjects were asked to rate the 65 needs from a scale of 1 (unimporant) to 5 (most important).

Measurement of NAS:

1.00-1.49 = unimportant;

1.50-2.49 = slightly important;

2.50-3.49 = moderate important;

3.50-4.49 = very important;

4.50-5.00 = most important.

Part III. Family Relationship Assessment Scale (FRAS): It is a self report rating scale developed by the investigator to assess the family relationship of the subjects. It consisted of 16 family situations divided into four dimensions of family relationship, which include supportive relationship, emotive relationship, cohesive relationship, and peaceful relationship. Each of the four dimensions consisted of 4 family situations. Subjects were asked to rate from a scale of 1 (not at all) to 5 (a great deal). The range in values was to reflect the different level of family relationship evaluated by the subjects.

Measurement of FRAS:

1.00-1.49 = very poor;

1.50-2.49 = poor;

2.50-3.49 = fair;

3.50-4.49 = good;

4.50-5.00 = very good.

Validity and reliability of the instruments

The Needs Assessment Scale (NAS) and Family Relationship Assessment Scale (FRAS) were written in English. They needed to be translated into Chinese by the investigator. The accuracy of the translation was validated by experts in this field. The Chinese version was considered the adaptability and utility in Chinese population. The content validity of these two interviewing forms (NAS and FRAS) were evaluated by two nurse experts in Chiang Mai, Thailand, and one psychologist, one general surgical doctor and three surgical nurse experts in Chengdu, China.

The reliability of these two interviewing forms (NAS and FRAS) were tested among the postmastectomy patients in the First Teaching Hospital of West China University of Medical Sciences in Chengdu by using Cronbach's alpha coefficient. The reliability of NAS was 0.74 and FRAS was 0.84.

Data collection procedure

After the approval of conducting the study was obtained from the administrator of the hospital and the surgeons in charge of the patients, women who met the sampling

criteria were identified as the samples by the investigator. At 3rd day after surgery, the patients were approached by the investigator, given a verbal explanation of the purposes of this study and the assurance of voluntary participation, confidentiality, and no harm to their participation, and asked if they were willing to participate. Written informed consent was obtained from those who were willing to participate in this study.

All women were bedside-interviewed twice by the investigator on 3rd day and 7th day after surgery. At 3rd day, they were asked to answer the questions in the three parts of the interview form, and at 7th day, they were asked to answer the questions in the part II of the interview form. The first interview lasted 45-60 minutes depending on the individual. The second interview lasted 25-30 minutes.

Analysis of Data

1. Frequency, percentage of the demographic data were obtained.

2. Mean and SD of the family relationship, and needs of postmastectomy patients at 3rd day and 7th day after surgery were calculated.

3. Pearson's correlation were used to calculate the relationship between the needs and age, and the needs and family relationship of postmastectomy patients.