#### CHAPTER 3

#### **METHODOLOGY**

This study is an attempt to assess the needs for continuing education among nurses who work in various clinical areas in three teaching hospitals of China Medical University located in Shenyang city, Liaoning province, China.

## Research design

A descriptive design was used for the objective stated.

### Papulation and sample

The study subjects came from 1,322 nursing population nurses working in various clinical units in three teaching hospitals of China Medical University. A proportional stratified random sampling of 20 percent was used. Nurses had equal opportunity to be selected regardless of their position and responsibilities. The sample size is 264 nurses. The criteria for sample collection were as follows:

- 1. graduated from any kind of nursing school;
- working in three teaching hospitals affiliated with China Medical University;
- 3. eligible regardless of sex, age, clinical area,

years of experience in nursing field, and positions; and

4. willing to participate in this study.

### Instrument

The instrument used was a questionnaire developed by the researcher which consisted of three parts. Part one was a demographic data collection form including sex, age, marital status, nursing school graduated, highest degree received, working hospital, working area, position, and years of experience. Part two was a Nurse's CE Needs Inventory consisted of 62 items. These items address specific CE needs divided and grouped into five content areas: general areas of nursing (14 items); nursing administration (14 items); nursing research (6 items); nursing education (9 items); and new knowledge and skills in nursing (19 items) respectively. Part three consists of three open-ended questions concerning educational forms for CE programs the nurses preferred, other topics nurses were willing to learn, and any problems and suggestions about CE in nursing.

### Content Validity Testing

The constructed questionnaire was brought to 9 nurse specialists for the content validity testing. Four specialists were Thai: Two were in fundamental of nursing, one is in

pediatric nursing, one is in adult nursing. Five Chinese specialists are in general nursing.

The researcher revised the questionnaire commented by the nurse specialists. After receiving approval by the four Thai nurse specialists, the questionnaire was translated into Chinese language. Upon correction and approval from Chinese nurse specialists, the questionnaire was ready to be tested for reliability.

## Reliability Testing

The questionnaire was tested for reliability by selecting 30 nurses who have characteristics similar to the subjects. Data were analyzed by means of Cronbach coefficient alpha. The reliability was obtained at 0.97.

### Data Collection Procedure

The study was conducted in cooperation with nursing service departments in three teaching hospitals of China Medical University. The researcher started formal contacting with the nursing administrators of nursing service departments in each of the teaching hospitals. Approval for accessing the subjects was obtained through a direct communication with the nursing administrators. After receiving approval from the nursing administrators, a sampling process was started.

Upon completion of sampling selection, self-contained packets were hand-delivered to the subjects by the researcher. A cover letter was also included in the packet to explain the purpose of the study as an endeavor to identify perceived needs for CE for nurses employed in teaching hospitals, and to invite them for participation. On each individualized cover letter, the researcher's real signature was used. This attitude toward facilitated positive subjects and communicate that they were valued as important individuals in the study. The letter incorporated sentences telling each subject that she was carefully selected and how valuable her responses would be. The tone of the letter indicated that only the subjects were the "consultants" who can give this needed information. The subjects were requested to complete the forms in private, and seal the packet and return to the box placed outside the nursing service department in each of the hospitals in two-week time. Questionnaires were then collected by the researcher for analysis. An excellent return rate, 241 subjects or 91 percent was obtained.

# Data Analysis

Data obtained from the study were analyzed using a Statistical Analysis System (SAS) on the computer. Descriptive statistics, frequency and percentage, were used to examine the continuing education needs among nurses. Content analysis was used to examine three open-ended questions.