

## **CHAPTER 3**

### **METHODOLOGY**

The purposes of this study were: (a) to describe the use of coping of Chinese women with gynecologic cancer, (b) to determine the effectiveness of coping used by Chinese women with gynecologic cancer, and (c) to compare the use and effectiveness of coping of Chinese women with gynecologic cancer of different age groups. In this chapter, the research design, subjects and setting, instrument, data collection procedure and methods of data analysis are presented.

#### **Design of the Study:**

A comparative descriptive design was used in this study.

#### **Subjects and Setting:**

The target population of this study was Chinese women with gynecologic cancer. The inclusion criteria were:

- (1). being diagnosed of having any kinds of gynecologic cancer,
- (2). having known cancer diagnosis for at least one month,

- (3). being over 20 years old, and
- (4). being receiving any methods of treatment.

The setting of this study was gynecologic ward of the second teaching hospital, West China University of Medical Science in Chengdu. In 1995, number of gynecologic cancer patients admitted for receiving all kinds of treatment was approximately 250 (Hospital Statistics Department, 1996). For this small population, at least 20 percent of population was required for sample size (Dempsey & Dempsey, 1981). Therefore, the estimated sample size was 50. Purposive sampling method was used to select subjects. Gynecologic cancer patients who met the criteria of this study would be eligible subjects.

#### **Instrument of Study:**

In this study, the instrument was a questionnaire including two parts: the demographic and personal data form and the revised Jalowiec Coping Scale (JCS) (Jalowiec, 1987). Each part of the instrument is presented as follows:

#### **Demographic and Personal Data Form**

This form was developed by this investigator for obtaining the subject's demographic and personal data including age, education, employment status, family income, marital status, type of cancer, type of currently received

treatment, and the length of time since knowing of cancer diagnosis.

#### Revised Jalowiec Coping Scale (JCS)

This scale was used to measure the use and effectiveness of coping of the subjects. This instrument is the revised version of the 1977 Jalowiec Coping Scale (JCS). It contains a list of 60 strategies for coping with stressful event. The 60 coping strategies listed on the revised JCS represent eight styles of coping behaviors: confrontive, evasive, optimistic, fatalistic, emotive, palliative, supportant, and self-reliant. This scale consists of two components: use and effectiveness components. Both components are 4-point rating scales. For the use component, the subject was asked to indicate whether a particular coping strategy was never, seldom, sometimes, or often used (from 0 to 3 score). For the effectiveness component, the subject was asked to rate how helpful each coping that she used was. The score ranges from 0 (not helpful) to 3 (very helpful). Ratings for items within each coping style are added to obtain a score for each coping style. The highest score indicates the greatest use and very helpful of that particular coping style or strategy.

The revised JCS was considered valid and reliable (Jalowiec, 1988). The homogeneity reliability using the mean

Cronbach's alpha ranged from 0.86 to 0.95 for the total use component and from 0.81 to 0.90 for the total effectiveness component (Halstead, 1994; Herth, 1990; Jalowiec, 1987; Jalowiec, 1988; Perry, 1990). The revised JCS had been translated by Guo (1996) into Chinese and used in postmastectomy patients. The accuracy, face validity, clarity and readability of the Chinese version had been examined by nursing experts who were good in both English and Chinese. In addition, backtranslation technic had been performed. Cronbach alpha of the Chinese version was 0.84 (Guo, 1996) which was considered as acceptable in postmastectomy patients. In this study, the Cronbach alpha was used to determine the internal consistency by 10 gynecologic patients. The results showed that Cronbach alpha values were 0.89 for the use component and 0.90 for effectiveness component which reached an acceptable level (Burns & Grove, 1993).

#### Data Collection Procedure

1. Permission from the director of the hospital and head nurse of the gynecologic ward was obtained in order to access to the subjects.

2. The subjects were selected from patient list of the gynecologic ward according to the inclusion criteria.

3. Each eligible subject was approached and assessed, by the investigator, whether she had known her diagnosis and agreed to participate in the study.

4. Verbal informed consent was obtained from each subject and the purpose of this study was explained to the subject for cooperation and participation.

5. The subject was informed about the confidentiality assured by the investigator.

6. Each volunteer subject was asked to complete the research instrument. The time for completing the questionnaire ranged from 30 to 40 minutes.

7. During this procedure, the investigator was present to provide more information if the questionnaire was not clear to the subject.

#### Data Analysis

All data were calculated using the SPSS computer software. Descriptive statistics was used to analyze data obtained from the demographic and personal data form and the revised JCS. Frequency, means, standard deviations, percentage and rank were calculated. Mean scores, percentage, rank, and frequency were calculated for the use and effectiveness of each coping style and coping strategy. The subjects were divided into three groups: 21-40 years, 41-60 years and older

than 60 years. The Kruskal-Wallis One-Way Analysis of Variance was used to compare coping styles among different groups of age. After differences were identified among groups, the Nemenyi test was used to analyze the difference between each pair of the different age groups (Yiang, 1992). The formula of this test was presented in Appendix D.