

CHAPTER 3

METHODOLOGY

The purpose of this study was to describe events that were appraised as stressful and stress appraisal among HCC patients undergone hepatectomy.

Design of the study

A descriptive design study was used to describe events and stress appraisal among HCC patients undergone hepatectomy.

Population and sample

The accessible population of the study was HCC patients who admitted at surgical ward in the Zhongshan Hospital, one of the university teaching hospitals of Shanghai Medical University (SMU) in Shanghai, China during November, 1999 to February, 2000.

Purposive sampling was used for this study. The criteria for eligibility were as follows:

1. Having hepatectomy for 48-72 hours.
2. Being alert, oriented, and cooperated.
3. Being able to communicate in Chinese.
4. Willing to participate in this study.

Instrumentation

The instruments included two parts: 1) Demographic Data Form, 2) Stress Appraisal Scale-Hepatectomy (SAS-H).

1. Demographic Data Record Form

The Demographic Data Record Form included subject's age, gender, education, occupation, family members, marital status, number of people under his/her responsibility, family income, way of hospital payment, date of diagnosis, stage of cancer, duration of hospitalization, incision location, duration of operation, and number of drainage tubes. Commitment to accomplish all tasks necessary for first recovery period and belief that he/she can successfully control over the situation during the first recovery phase in the hospital were measured by asking the patients to rate on four point (0-4) rating scale ranged from "no" to "a lot".

2. Stress Appraisal Scale-Hepatectomy (SAS-H)

The researcher developed the Stress Appraisal Scale-Hepatectomy (SAS-H) based on literature review within the framework of Lazarus and Folkman's transaction model (1984). It was a 40-item of 5 point (0-4) rating scale. This scale consisted of two dimensions: illness-related dimension of 24 items and hospital-related of 16 items. It was used to measure events and stress appraisal by HCC patients undergone hepatectomy during their 48 to 72 hours after operation.

Scoring of the SAS: The 40 items was rated on 0 to 4 interval scale. Zero (0) meant the item was not applicable

since the event did not occur, whereas the rating score ranging from 1 to 4 indicated the stress level: 1='not stressful', 2='mild stressful', 3='moderate stressful', and 4='extreme stressful.' Number of events faced by the HCC patients undergone hepatectomy referred to sum of non zero items. The total score of non zero items divided by the sum of non zero items of which the patient rated indicated the stress appraisal. Therefore, the possible score of events that were appraised as stressful ranges from 0-40 whereas the possible score of stress appraisal ranged from 1 to 4. The scores between 1 to 1.99, 2 to 2.99, 3 to 4 were considered to be low, moderate, and high stress appraisal, respectively.

3. Content validity and reliability

The SAS-H was developed by the researcher. It was first written in English and had never been used in Chinese population before. It was checked by experts from Faculty of Nursing, Chiang Mai University, Thailand. Their suggestions were incorporated into the instrument. The content validity of the instrument was achieved with the Content Validity Index (CVI) of 0.95. The instruments were translated into Chinese by a linguistic expert. The accuracy of the translation was validated by another linguistic expert from SMU using back translation method. Reliability of the instrument was tested among 10 patients who were similar to the purposed subjects of the study. Cronbach's Alpha was calculated to ensure the internal consistency. The reliability of overall events, illness-related events, and

hospital-related event were achieved with Cronbach's Alpha of 0.85, 0.78, and 0.77.

Data collection procedure

All patients who met the inclusion criteria were included in the study. Data was collected as follow:

1. Asked permission from the administrators of hospital.

2. Obtained names and bed numbers of HCC patients undergone hepatectomy from the Patients list Chart or being informed by nurses or physicians of this hospital.

3. Reviewed the records to identify potential subjects according to the inclusion criteria.

4. Protection of human right for the subjects was assured as follows:

- 4.1 Subjects were informed of confidentiality, assurance, and the purposes of the study by researcher.

- 4.2 Each subject's verbal consent were obtained prior to the study.

- 4.3 Data was secured during the study. It was accessed to the researcher for the only purpose of the study.

- 4.4 Subjects were free to participate and /or withdraw from the study at any time prior to completion of this study.

5. The researcher read through each of the item and mark their responses on the questionnaire for them accordingly without further explanation.

Analysis of data

All data was analyzed by using Statistical Package for the Social Sciences (SPSS).

1. Frequency, percentage, means, and standard deviation were used to describe the demographic data.

2. Average, frequency, means and standard deviation were used to describe the number of events that were appraised as stressful and stress appraisal.