

CHAPTER 3

METHODOLOGY

The purpose of this study was to describe the needs of hepatectomy patient with pain, nurse responses, and the difference between such needs and such nurse responses.

Design of the study

A descriptive design was used in this study.

Population and sample

The accessible sample of the study was hepatocellular carcinoma patients who admitted at surgical wards in the First Affiliated Hospital and Cancer Center of Sun Yat-sen University of Medical Sciences (SUMS) in Guangzhou, Guangdong Province, China during November, 1998 to February, 1999. Forty subjects were recruited.

Purposive sampling was used to include the subjects based on the following criteria:

1. Being diagnosed by physicians as having HCC.
2. Having hepatectomy for 48 to 72 hours
3. Being alert, oriented, and cooperated.
4. Being able to communicate in Chinese.
5. Willing to participate in the study.

Instrumentation

The instruments included Demographic Data Form, Needs of Hepatectomy Patient with Pain and Nurse Responses Questionnaire.

1. Demographic Data Form

Demographic Data Form consisted of the subjects' personal information about age, gender, marital status, educational level, occupation, family income, way of payment, surgical incision, pain medication, and treatment site.

2. Needs of Hepatectomy Patient with Pain and Nurse Responses Questionnaire

Needs of Hepatectomy Patient with Pain and Nurse Responses Questionnaire was used to measure needs of hepatectomy patient with pain and nurse responses as perceived by the patients. It was a 4-point rating scale developed by the researcher based on intensive literature review. It consisted of 22 statements with two columns. The first column aimed at needs of hepatectomy patient with pain assessment and another for the assessment of nurse responses to such needs as perceived by the patients. It was classified into three levels of needs included physiological needs, safety needs, as well as love and belonging needs. The physiological needs consisted of 12 statements included statement number 4, 9, 10, 12, 13, 14,

15, 16, 18, 19, 20, and 21 with the possible score of 0 to 36. The safety needs consisted of 5 statements included statement number 1, 2, 5, 17, and 22 with possible score of 0 to 15. The love and belonging needs consisted of 5 statements included statement number 3, 6, 7, 8, and 11 with possible score of 0 to 15. The patients were asked to recall and rate their needs regarding hepatectomy pain within the first 48 hours after operation on scale ranges from 0 to 3, from "no need" (0) to "tremendous need" (3). In addition, they were asked to rate nurse responses to such needs ranged from 0 to 3, from "not at all" (0) to "enough" (3). The possible score for each column ranged from 0 to 66.

Test for validity and reliability

The instrument was checked by five experts at Surgical Nursing Department, 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 0.927. After the instrument was translated into Chinese by the researcher, the accuracy of the translation was validated by a linguistic expert of Faculty of Nursing of SUMS using back translation method. Reliability of the instrument was tested among 10 patients who were similar to the purposed subjects of this study. Cronbach's Alpha was calculated to ensure the

internal consistency. The reliability of the instrument was achieved with Cronbach's Alpha of 0.86.

Data collection procedure

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

1. Asked permission from the administrators of Nursing Department of Hospital.

2. Obtained names and bed numbers of hepatectomy patients from the Patients List/Chart or being informed by nurses or physicians of these two hospitals.

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

4. Obtained verbal consent to collect data from patients in the wards begin with the researcher's self-introduction, and followed by explaining the purpose and procedure of the study and assurance of the voluntary participation, confidentiality, and no harm of participation to the subjects and inviting the subjects to participate. They were free to withdraw from the study at any time.

5. Asked each subject to complete the questionnaire. In case that the subject could not read nor write, the researcher read through each of the item and marked their responses on the questionnaire for them accordingly without further explanation.

Analysis of data

All data was analyzed by computer using Statistic Package for the Social Science (SPSS).

1. Frequency and percentage were used to describe the demographic data.

2. Mean and standard deviation were used to describe the needs of hepatectomy patient with pain and nurse responses as perceived by the patients.

3. Wilcoxon Matched-Pairs Signed Ranks Test was used to test the difference of mean rank and sum ranks between needs of hepatectomy patient with pain and nurse responses as perceived by the patients as tested for normal distribution of the data was unmet.