

CHAPTER 3

METHODOLOGY

The purposes of this study were to describe stressor, stress appraisal, and coping among burned patients.

Design of the study

A descriptive design was used to describe stressor, stress appraisal, and coping among burned patients.

Population and sample

The target population of this study was burned patients who was scheduled to be discharged from Burned and Plastic Surgical Department of one of the three teaching hospitals of Hunan Medical University. The data collection was done during November 1998 to January 1999.

Purposive sampling technique was used to recruit 60 subjects for this study (Polit & Hungler, 1995). The criteria for eligibility were as follows:

1. Being 18 to 60 years old;
2. First time hospitalization after burn injury;
3. Being scheduled for discharge;
4. Being able to communicate in Chinese; and
5. Willing to participate in this study.

Instrumentation

The instrument used for data collection in this study was the questionnaire which composed of three parts: 1) demographic data record form, 2) Stress Appraisal Scale, and 3) Modified Jalowiec Coping Scale.

1. Demographic data record form

The demographic data record form included subjects' age, gender, educational background, living status, marital status, number of people under his/her responsibility, occupation, family income, diagnosis, location and extent of burns, number of operation related to burn injury, duration of hospitalization, and way of hospital payment.

2. Stress Appraisal Scale (SAS)

The researcher developed the Stress Appraisal Scale based on review of the literature . It was a 33-item of 5-point (0-4) rating scale. This scale consisted of two dimensions: personal dimension of 19 items and environmental dimension of 14 items. It was used to measure stress appraised by adult burned hospitalized patients who were scheduled to be discharged. The subjects were asked to recall the situation since having full conscious in the hospital after the burn injury.

Scoring of the SAS: The 33 items were rated on 0 to 4. Zero (0) meant the item was inapplicable since the difficulty did not occur. The rating score ranged from 1 to 4 indicated the severity of bothersome: 1 (did not bothersome), 2 (mildly bothersome), 3 moderately bothersome, and 4 (extremely bothersome). Frequency referred to sum of non zero items, which reflected the number of difficulties or stressors at that time. Intensity of stress score referred to sum of raw score from non zero items and divided by the number of non zero items, which indicated the stress appraisal of the person. Therefore, the possible score of stressors ranged from 0 to 33 whereas the possible score of stress appraisal ranged from 1 to 4.

3. Modified Jalowiec Coping Scale (MJCS)

The Jalowiec Coping Scale is a 40-item, 5-point Likert Scale developed by Jalowiec, in 1979. This Scale was designed to assess coping strategies that the people commonly used to manage stressful situation. It yielded 15 problem-focused and 25 emotion-focused coping strategies.

Alpha reliability coefficients for total coping scores, for problem and emotion subscale scores ranged from 0.75 to 0.86 (Jalowiec, et al., 1984; Powers & Jalowiec, 1987). Test-retest reliability coefficients ranged from 0.78

to .91 (Foster, 1984, cited in Jalowiec, 1988; Jalowiec, 1979; Langner, 1983, cited in Jalowiec, 1988).

Since some of the original items were not applicable for Chinese adult burned hospitalized patients who were scheduled to be discharged, such items were either dropped out or modified accordingly. Based on the review of the literature, the JCS was modified by the researcher. The Modified JCS (MJCS) included 35 items. It was used to assess coping used by patients since they were fully conscious in the hospital after burned injury prior to discharge.

Scoring of the MJCS: The 35 coping ways were rated on a 1 (never) to 4 (always) Likert scale indicating extent of use of each way. Rating for items within each subscale were added and divided by numbers of applicable items to obtain a score for each subscale. Higher score indicated greater use of that coping strategy.

Content validity and reliability

The SAS was developed and MJCS was modified by the researcher, respectively. Both measures were written in English and had never been used in Chinese population before. Their content validity were checked by a panel of five experts at the Faculty of Nursing, Chiang Mai University, Thailand. The experts were provided with

relevant information about the study and were required to give either agreement or disagreement to each item of the SAS and the MJCS. Their suggestion was incorporated into the measures accordingly. The content validity index of the two measures was achieved at 0.87 and 0.86, respectively.

The SAS and MJCS were then translated into Chinese by the researcher. A bilingual expert at Hunan Medical University using back translation technique checked Chinese version for face validity.

Cronbach reliability of the SAS and the MJCS were tested among 10 adult burned hospitalized patients who were similar to those included in this study. The internal consistency reliability coefficient of the SAS and the MJCS were 0.88 and 0.84, respectively. For personal dimension and environmental dimension of SAS, the Cronbach alpha were 0.74 and 0.71, respectively. For problem-focused and emotion-focused coping subscales of the MJCS, the Cronbach alpha were 0.78 and 0.72, respectively.

Data collection procedure

1. Getting approval from the Graduate committee of the Faculty of Nursing at Chiang Mai University, Thailand.

2. Permission of accessing to the subjects and conducting the study was obtained from administrators,

physicians, and incharge nurses of the Burned and Plastic Surgical Department of the three teaching hospitals.

3. Subjects who met the inclusion criteria were recruited and given the questionnaire to fill in by themselves.

4. Protecting of human rights 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 was obtained prior to the study.

4.3 Data was secured during the study. It was accessed to only by researcher for the 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.

The method of self-administered questionnaire was used for data collection. The time taken for completion of the questionnaire was about one hour. For those who could not read and write Chinese, the researcher read through the items and marked on the questionnaire for them without further explanation.

Analysis of data

All data was calculated by using statistical package for social science. Descriptive statistics was used to analyze the data as follows :

1. Frequency and percentage were used to describe the demographic data.
2. Means and standard deviation were used to describe number of stressor and stress appraisal.
3. Frequency and percentage of problem-focused coping dominant subjects and emotion-focused coping dominant subjects were calculated in order to achieve the second objective.