

## CHAPTER 1

### INTRODUCTION

#### **Background and significance of reseach problem**

Burns is common accidents in everyday life. In the United States, approximately 2 million people suffer from burn injuries each year. There are 80,000 of burned patients admitted to hospitals and 6,500 of them die as a result of burn (Morris, & Malt, 1994). In Britain, the annual incidence of burns injuries is over 100,000 which about 13,000 of them require hospitalization (Settle, 1996). In China, it is estimated that annual morbidity of burns is 2% of total population, meaning that 22 million patients suffer from burns each year. Of these, 5% or 1.1 million require inpatient care (Qin, 1992). At three teaching hospitals of Hunan Medical University, the biggest Medical University of Hunan, there were 380, 360, and 310 burned patients admitted in 1995, 1996, and 1997, respectively (Annual Hospital Reports of Hunan Medical University, 1995, 1996, & 1997).

In the early 1960s, patients with a 50% total body surface area (TBSA) burns, had only 30% to 40% chance of survival. Within the last 30 years, with the advanced burns

management, the survival rate has improved significantly. During 1990s, the survival rate for this group was up to between 70% to 80% (Cardona, Hurn, Mason, Scanlon, & Veise-Berry, 1994). In China, the survival rate of burned patients has also increased during the last two decades (Chinese Report, 1989).

Burn injury is one of the most traumatic dehumanized injuries an individual can experience (Davis & Sheely-Adolphson, 1997). The burned patients enter the situation unprepared. With suddenness and severity of injury, they are plunged into physical and emotional crisis (Lewis, & Collier, 1993). High level of stress can be anticipated.

At acute phase, burned survivors often experience severe pain originated from injury as well as its treatment (Bernstein, 1993, cited in Difede, Jaffe, Musngi, Perry, & Yurt, 1997). Therapeutic procedures are useful, but cause the most intense pain (Choiniere, Melzack, Rodeau, Girard, & Paquin, 1989). During this phase, emotional distress of the patients are found to have high correlation with pain perception (Difede, et al., 1997).

As the wound heals, newly-healed skin with changed color, gradually raised scar, and disfigured appearance are presented (Settle, 1996). Besides the major cosmetic problem, it results in various degree of contracture which indicates the need of repeated constructive procedure following discharge. Chronic pain, newly healed skin

itching, and long utilization of pressure garments are assaulted burned patients (Settle, 1996). For pre-discharged patients, they not only face with both real changes such as altered appearance, and/or possible alteration or limitation of body function, sensation, but also the potential loss of job and former life style when return to their home community.

The burn unit in the hospital is a cocoon of comfort and an acceptance in which the patient's disfigurement and disabilities are not a subject of interest, remark, or question (Partridge & Robinson, 1995). The outside world, even it is their home environment, the reaction of others may not be the same as inside the hospital. People's reactions to their odd-looking marks are kept in their concern. A whole host of worries may crowd in and make the transition to home community more difficult. Internal and external demands require the burned individuals make corresponding adaptive response to these changes.

As the discharge day approaches, patients face with many stressors and many of them exhibit apprehension, fears, and anxiety (Franulic, Gonzalez, Trucco, & Vallejos, 1996). The more concern of appearance and function, the more fear of facing their future life. Discharging from hospital is one of the most stressful times for them (Khoosal, Broad, Smith, & Settle, 1987; Wallace & Lee, 1988; Partridge & Robinson, 1995). Nevertheless, stress is appraised

differently among individual burned patients. The individuals' personal and environmental stressor are cognitively appraised whether these demands as threats exceed resources available to them.

Transaction model (Lazarus & Folkman, 1984) was used as a framework for this study. Stress was defined as a result of the interaction between the person and the environment which was appraised by the person as taxing or exceeding his or her resources and endangering his or her well being. According to this model an individual's stress level is the net result of the primary, and secondary appraisal, and reappraisal of his or her personal and external demands, coping resources, and coping constraints at that moment. However, little information has been found about stress among adult burned patients. As burned patients were brought to face with altered appearance, loss of function, and long-term rehabilitation, great demand for coping was needed to mandate the stress.

Lazarus and Folkman (1984) defined coping as constantly changing cognitive and behavioral efforts to manage specific stress. The effectiveness of coping in reducing stress depends on a balance between the demands, coping resources, constraints, and strategies of each individual. It could be either emotion-focused coping, problem-focused coping or both (Lazarus & Folkman, 1984). Coping strategies were different, depending on the situation

appraised by the individual as well as the accessible resources which were available to him/her at that time.

Many hospitalized burned patients showed a variety of symptoms suggesting various levels of distress, which was manifested by anger, fear (Hurren, 1995), anxiety, delirium, depression (Patterson, Everett, Bombardier, Questad, Lee, & Marvin, 1993), insomnia (Tucker, 1987), difficulty of concentrating, and hypervigilance and exaggerating startle response (Blumenfield & Schoeps, 1992). Evidence showed that 31% of burned patients who were scheduled to be discharged experienced severe psychological problems such as anxiety and depression (Wallace & Lees, 1988). It was similar to the study of Tucker (1987) that anxiety and depression were found moderately elevated among burned patients at pre-discharge period.

It was noted that, in general, burned patients often utilized their own specific defense coping mechanism such as dissociation, repression, denial, rejection, projection, bargaining, and acceptance (Roberts & Appleton, 1989). However, very few studies have been found on stressor, stress appraisal, coping among burned patients, specifically during the first hospitalization prior to discharge.

Strong evidences as mentioned show that facing with personal and environmental stressor, the burned patients at the time they are scheduled to be discharged have

psychological pressure and eventually provoke stress responses.

According to Lazarus & Folkman (1984), coping is an ongoing process. Stress appraisal and coping in the past may have an impact on stress appraisal and coping at present and in the future at any certain point of time. The study of stressor, stress appraisal, and coping of adult pre-hospital discharge burned patient would help nurses understand of this group of patients better. This study aimed at description of stressor, stress appraisal, and coping of burned patients as scheduled to be discharged.

#### **Objectives of the study**

1. To describe the stressor and stress appraisal among burned patients.
2. To describe coping used by burned patients.

#### **Research questions**

1. What was the stressor and stress appraisal among burned patients?
2. What was the coping used by burned patients?

#### **Scope of the study**

This study was conducted at the Burned and Plastic Surgical Department of three teaching hospitals of Hunan Medical University, namely : the First, the Second, and the

Third Teaching Hospitals. The data collection was done during November 1998 to January 1999.

#### **Definition of terms**

**Stressor** was defined as the demands of the person-environment relationship that are appraised as stressful. It was measured by Stress Appraisal Scale, developed by the researcher based on intensive literature review.

**Stress** referred to the consequence of transaction between a burned adult individual and his/her environment that was appraised by him/herself as taxing or exceeding his/her resources and endangering his/her well-being.

**Stress appraisal** was an evaluative process that determines why and to what a particular transaction or series of transactions between the person and environment is stressful. It was measured by Stress Appraisal Scale developed by the researcher based on intensive literature review.

**Coping**

referred to the methods or strategies of constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that were appraised as taxing or exceeding the resources of an adult burned person. Coping included two major strategies, namely problem-focused coping and emotion-focused coping. It was measured by Jalowiec Coping Scale (1979) which was modified by the researcher.

**Burned patient**

referred to an adult person experienced burn injury who was scheduled to be discharged from the Burned and Plastic Surgical Department of one of the three teaching hospitals of Hunan Medical University namely : the First, the Second, and the Third Teaching Hospitals after injury and first hospitalization.