CHAPTER 1

INTRODUCTION

Background and significance of the research problem

Head injuries are among the most devastating and lethal catastrophes in humans. In the United States, head injury is the leading causes of death and disability among children and young adults (Hudak, Gallo, & Morton, 1998). Head injury has claimed over 75,000 to 100,000 lives each year. Of the survivors of head injury, 70,000 to 90,000 will have serious functional loss, 5,000 will develop epilepsy, and 2,000 will remain in a persistent vegetative state life-long (Hickey, 1997).

In China, because of the number of population in the city has been increasing rapidly, more and more motor vehicles are on the road, the rate of traffic accident is increasing accordingly. As a result, there is a steadily increase in the incidence of head injuries. Liu and Zhang (1999) reported 2,712 cases of head injury admitted in a teaching hospital in a big city of China. Among these cases, the mortality rate was 12.2 percent, the disability rate was 14.4 percent and 1.4 percent of the patients remained in vegetative states. The majority of head injuries are caused by motor vehicle accidents, followed by falls and assaults.

According to the Annual Reports (1999) of the three teaching hospitals of Sun Yat-Sen University of Medical Science, 240 head injured patients were admitted in these hospitals in 1999.

Head injury is a stressful event to patients. It may result in a combination of physical, psychological, cognitive and social dysfunction of the patients (O'Neill & Carter, 1998).

Family members function interdependently and reciprocally with each other. When sudden and traumatic injuries occur to one member, the entire family system is involved in the crisis (Cardona, Hurn, Scanlon, & Verse-Berry, 1994). Johnson and Roberts (1996) reported that the diagnostic and treatment procedures experienced by head injured patient during life-threatening illness are major sources of distress for the patient and the family. The state of unconsciousness and use of ventilation support, often seen in acute brain injured patient, have been found to contribute further to the stressful nature for the patient and the family (Engli & Kirsivali-Farmer, 1993). It has been reported by many authors that family members' uncertainty of the head injured patients' physical and mental outcomes, fear of the death or permanent disability of loved one are the major stressors for the family members of the head injured patient (Engli & Kirsivali-Farmer, 1993; Pittman & Fowler, 1998).

In most cases of head injuries, the sudden and unexpected nature of the event prevents any anticipation or planning which mostly required immediate response from family members. They have little or no time to prepare and have little experience in dealing with these situations. When the family members of the head injured patient sense a loss of control over the stressful situation, hopelessness and helplessness are often the results (Johnson & Roberts, 1996). It has been reported that head injury had impacts on the family member's emotional status as anxiety, shock, frightening, denial, loss, grief, depression, and guilty. These emotional impacts leave the family members of the head injured patients feel totally out of control over the stressful event (Cardona, Hurn, Scanlon, & Verse-Berry, 1994).

The consequences of head injury disrupt family roles and responsibilities, family relationship and routines (Cardona, Hurn, Scanlon, & Verse-Berry, 1994). The financial impact has also been reported by family members of the head injured patients (O'Neill & Carter, 1998). These are also stressful events to the family members of head injured patients.

According to Lazarus and Folkman's (1984) Stress and Coping model, stress is defined as a particular relationship between the person and his or her environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being. Cognitive

appraisal is a process through which the person evaluates whether a particular encounter with the environment is relevant to his or her well-being, and if so, in what ways. In primary appraisal, the person evaluates whether he or she has anything at stake in this encounter. Primary appraisal can be distinguished as(1) irrelevant (2) benign-positive or (3) stressful. Stress appraisal includes harm/loss, threat, and challenge. In secondary appraisal, available resources and options of coping are assessed.

Lazarus and Folkman (1984) also identified that the life-threatening or incapacitating illness are appraised as harmful or threatening. Head injury is a life-threatening situation. Most of family members of head injured patients appraised this stressful situation as threat to their well-being. Once an event has been perceived as stressful, the person then mobilized coping modes. Social support is one of important coping resources identified by Lazarus and Folkman (1984).

Brandt and Weinert (1981) defined social support as relational provision which composed of five dimensions including provision for attachment/intimacy, social integration, opportunity for nurturant behavior, reassurance of worth as an individual and in role accomplishments, and the availability of informational, emotional and material helps. Attachment is provided by dyadic relations of an intimate nature. Social integration is provided through a network of relationships which participants share concerns,

information, and ideas. Opportunity for nurturance and reassurance of worth give a sense of being needed and competent, and increased the self-esteem. Availability of information, emotional and material helps is useful in informational and fanatical deficit situation.

Social support is an important function of the social network. It is the positive and harmonious interpersonal interactions that occur within, directly or indirectly buffers stressful life events. This buffering works in two ways. The first is that, during stressful events, network members provide information as well as guidance and help the person to interpret the situation. The second, members of the social network provide comfort and ways of coping with situations (Caplan, 1974). Only those interactions that are perceived by a person as being positive and harmonious are considered social support. Social support is considered as an important coping resource can provide coping options in stressful transaction by enhancing the problem-focus coping and emotional-focus coping strategies (Lazarus & Folkman, 1984). Several studies indicated that the presence of social support reduced the experience of stress among the individual (Affiliation, 1997; Cobb, 1976; Davis, 1990; & Seckel & Birney, 1996).

Although social support systems have been studied among various groups of patient over the years, there are few studies available, especially in China, concerning perceived social support and its relationship to the stress

appraised by family members of the Chinese head injured patient. Knowledge gain from this study will help nurses to have a better understanding about relationship of social support and stress, so, nurses can provide appropriate system of care to family members of head injured patient.

Objectives of the study

The objectives of this study were:

1. to describe the level of social support perceived by the family members of the head injured patient;

2. to describe the level of stress appraised by family members of the head injured patient;

3. to ascertain the relationship between social support and stress among family members of head injured patient.

Research Questions

1. What was the level of social support perceived by the family members of the head injured patient?

2. What was the level of stress appraised by the family members of the head injured patient?

3. Was there any relationship between social support and stress among family members of the head injured patient?

Definition of terms

Social support — refers to relational provisions by family members, friends, health professionals and other social networks as reported by family members of the head injured patients, consisted of five dimensions: attachment or intimacy, social integration, opportunity for nurturant behavior, reassurance of worth as an individual and in role accomplishments, and the availability of informational, emotional, and material helps. It was measured by Personal Resource Questionnaire-85 part 2 developed by Brandt and Weinert (1981) which was modified and translated into Chinese by Yan (1997).

Stress — refers to a particular relationship between the family members and the situation of the head injured patients that is appraised by family members as taxing or exceeding their resources and endangering their well-being. It was measured by the Stress Appraisal

Questionnaire (SAQ) which was developed by the investigator basing on Lazarus and Folkman's Model of Stress and Coping (1984).

Head injured patient — refers to those individuals who had moderate or severe head injury according to Glasgow Coma Scale scores admitted in surgical ward and intensive care unit of the three teaching hospitals of Sun Yat-Sen University of Medical Science.

Family member — refers to an adult who relate to the head injured patient as spouse, parents, sibling, son, daughter or relatives living in the same household with the head injured patient, and the main person taking care of the patient.