CHAPTER 1

INTRODUCTION

Background and significance of research problem

Traumatic injuries are becoming more prevalent due to advances in technology and equipment, and the increasing number of vehicles used around the world. The number of traumatic amputations is increasing (Wilma, Barbara & Nancy, 1980). In the United States, there are more than 47,000 traumatic amputations each year (Rounseville, 1992). In Thailand, there were 122,400 in 1991. Traumatic amputation accounted for 89.6% of all amputees in Danaidutsadeekul's study of transition process of Thai amputees (1999).

In China, since the door was opened to the outside world, economic reform has made industry develope quickly, and the number of the vehicles has increased tremendously. The amputation procedure has increased from 87 cases in 1991 to 197 cases in 1998, 54% of all amputations were in the three teaching hospitals affiliated to China Medical University which is located in one of the biggest cities of China, Shenyang,with a population of 657.4 millions (The annual report of China Medical University, 1998).

Traumatic amputation has been perceived as a crisis of life (Smitherman, 1981). It is the removal of a limb, which is damaged beyond repair (Patrick, Wood, Roskosky, Bruno & Graven, 1991). To most people, amputation has a negative implication (Patrick, Wood, Roskosky, Bruno &

Graven, 1991). The loss of limbs has been perceived, in most cultures and societies, not only as a loss of a body part, and loss of the bodily function, but also as a loss of health, a disfigurement and disgrace (Smitherman, 1981).

An amputee is classified as one kind of disability. The severity of the disability can be evaluated from the number of amputated limbs, level of amputation, cause of amputation, presence of complication,and their dominant function before amputation. For example, an amputee who lost two limbs will lose more functional ability than one who has lost one limb. A person with above the knee amputation experiences greater difficulty in performing the activities of daily living than the person with below knee amputation (Medhat, Patricia & Mohaneed, 1990). Sudden traumatic amputation might cause more emotional problems than amputation by disease. The presence of complications prohibits the fitting of prosthesis. For right-handed persons, if the right hand is lost he/she will have more difficulties than those who lost their left hand. All limitations of physical ability will affect a person's ability to meet their psychosocial needs and perform their personal responsibilities.

Traumatic amputation, whether it is traffic-related, or work-related, often occurs in a sudden, unanticipated manner.The amputees lack the proper mental and psychological preparation to accept the condition of being an amputee. Losing an extremity at any level is similar to experiencing the death of a loved one (Parkes, 1975). The feeling of being a partial person can rapidly produce a state of mind

that will swallow a personality and destroy the ability to think in a positive manner (Potterton, 1986). Amputees suffer a more acute state of crisis in reaction to an obvious loss of functioning (Yetzer, 1996). At the early stage, the individual may experience sadness, hopelessness, depression, worry, and denial of their loss (Poomsrisawat, 1993, cited in Danaidutsadeekul, 1999).

Patients and families usually go through the grief process. They mourn the loss of a visible body part and function, effects on the life style and body image (Carpenito, 1991).Amputees often experience every stage of the loss process strongly. They bargain for any treatment other than amputation; deny the significance of the amputation or that amputation will alter their life; feel depression that they will never be whole again; show noncompliance; feel anger at the care taker, at the family and at themselves and feel guilt. Some amputees may take weeks, months, or years to accept the fact of being amputated (Brown, 1990). Acceptance is not necessarily a permanent state. The individual can swing back and forth among all the stages of grief. Some may never adjust totally to the loss of the body part, and cope effectively with the loss and finally may experience serious emotional disorder such as posttraumatic stress syndrome, neurotic depression, phobias, guilt and feelings of dissociation and alienation (Mendelson, Berech, Pollack, Kappel, 1986).

All of the emotional difficulties during the recovery seem to be the result of a decrease in self-esteem, self-image, self-concept, loss of body integrity, and

uncertain prognosis (Frierson and Lippmann, 1987) and being dependent (Danaidutsadeekul, 1999). These negative feelings weaken their strength and motivation to be involved in the activities of daily living, and lead to dissatisfaction with life.

Furthermore amputation has an effect on social well being such as changes of life style and the role of the individual in family and society. For example, the housewife will find it difficult to perform the same household tasks after the loss of an arm. The expected roles both in family and society must be adapted so that they can be performed with less difficulty (Danaidutsadeekul, 1999).Amputees may perceive themselves as handicapped persons and so are too embarrassed to keep any social contact for fear that society will disparage and devalue them. They can become isolated from society. The amputation can interfere with his/her role in society and profession (Drench, 1994). All of these changes are due to the lack of potency in controlling other parts of the body (Drench, 1994).

Amputation also has a significant effect on the socio-economic status of the amputees. The amputees seemed to be less productive (Livingston, Keenan, Kim, Elcavage, 1994). After losing arm or leg, amputees may have to end their career. It is then very difficult to find a new job because of their physical status. If amputees have no job, they have no income for their family.Particularly when the amputee was the leader of the family, his/her role has to be changed from independence to dependence. The subsequent result is revenue loss for himself and his family. Economic

difficulties are major problems for amputees. They often can not maintain a social role and live happily in society. All of these impacts contribute to a major alteration of most aspects of a patient's life,and therefore disturbance of quality of life may be found.

There is no general agreement regarding the definition of quality of life. Quality of life has been commonly defined as happiness or satisfaction (Ferrans and Power, 1992). Some authors define quality of life as synonymous with well-being and life satisfaction (Anderson, 1995; Hicks, Larson, and Ferrans, 1992, cited in Zhu, 1997). Quality of life has been defined as the degree to which a person's life experiences are satisfying (Zhan, 1992). The concept of quality of life is both multi-dimensional and context-related since human experiences are dynamic and complex (Zhan, 1992).

According to Zhan (1992), there are four important dimensions of quality of life. Life satisfaction refers to life as a whole rather than to specific domains of life experience. It is a cognitive evaluation based on the facts of a person's circumstances and derived from a comparison of one's aspiration to one's actual achievement. Self-concept refers to the composite of beliefs and feelings that one holds about oneself at a given time. It focuses on the individual's assessment and evaluation of himself or herself as an object in the life experience. Health and functioning is viewed as an objective indicator of the quality of life regarding activity in daily life, mobility or absence of disease. Socio-economic factors have been assessed

subjectively in terms of perceived adequacy of income and satisfaction with financial resources.

Several studies on quality of life of amputees in western countries reported that amputees had lower levels of quality of life.Pell, Donnan, Fowkers,and Ruckley (1993) indicated that quality of life among 149 patients following lower limb amputation for peripheral arterial disease secondary to the restricted mobility was poor.The result was similar with Albert, Frats, and Delia's study (1996) that the amputees' walking ability was poor and quality of life was low.According to the study of Near, Scathe, Punters, Angry & Disane in 1991 a small number of patients after amputation for arteriosclerosis could achieve an acceptable quality of life.

In China, the number of amputees has increased during the last decade. However, the life style of amputees in China is limited. There are no Disable-Act concerns with special benefits for the disabled, such as employment and fixed income. Few organizations have been established to support, help, and protect amputees besides the counseling and supporting from nurses and doctors in the hospital. After discharge from the hospital,amputees have to live in actual society and be independent. They usually face more challenges to maintain physical, psychological and social well being.

Up to now, very few studies of quality of life in China have been reported. No study of quality of life among amputees has not been found yet, and little is known about the quality of life of the amputees by the health

professionals. Also as the culture and ways of life of Chinese people are quite different from those in western countries, the results from elsewhere may not be suitable to Chinese amputees. Therefore there is a need to identify and understand quality of life among Chinese amputees.

The results and knowledge gained from this study will enhance nurses with a better understanding about quality of life among Chinese amputees. Nurses can therefore provide appropriate nursing care to promote and improve quality of life which is the goal of the nursing profession.

Objective of the study

The objective of the study is to describe overall and each dimension of quality of life among traumatic amputees (life satisfaction, self-concept, health and functioning, and socio- economic factors).

Research question

What is the quality of life among traumatic amputees (overall and in each dimension: life satisfaction, self-concept, health and functioning and socio-economic factors)?

Definition of terms

Traumatic amputees: Refers to a person who has received any level of amputation which was caused by traumatic accidents.

Quality of life: Refers to the degree to which a person's life experiences are satisfying. It is categorized into four dimensions; life satisfaction, self-concept, health and functioning and socio-economic factors. It was measured by a Modified Amputee Quality of Life Questionnaire modified by the researcher from the instrument developed by Zhang (1998) based on Zhan's concept.