

CHAPTER 1

INTRODUCTION

Background and significance of research problem

Of nearly 200 varieties of cancer, breast cancer is the most common type among women and it continues to increase. Reports from the United States showed that between 1980 and 1987 the breast cancer incidence rate grew from 84.8 per 100,000 to 112.4 per 100,000. It showed an increase of 32.5%, or more than 4% per year (Garfinkel, Boring & Heath, 1994).

In China, the incidence of breast cancer has been increasing rapidly. It has been the second or the third highest malignant tumor among women (Zhou, 1994). Women aged 40-49 years old are more susceptible to breast cancer. In Beijing, the incidence rate of breast cancer is increasing gradually by year (Gao, 1993) and about 83.1% of the breast cancer occur in women aged 30-64 years old, although women in this age only account for 39.7% of the female population in this area. According to the survey in Shanghai, one of the biggest cities in China, the incidence of breast cancer was 17.6 per 100,000 between 1972 and 1974. It increased to 21.3 per 100,000 between 1982 and 1984, 28.1 per 100,000 in 1989 and a sharp increase in 1990 to 37 per 100,000 (Shanghai Oncology Research Institute, 1992). Similar situations were

also found in other cities in China, such as in Tianjin the incidence raised from 17.78 per hundred thousands in 1981 to 23.03 per hundred thousands in 1987. It has become the major cancer in women in Beijing, Shanghai and Tianjin, the three major cities in China (Li, 1993).

Advances in treatment and detection have had significant effects on prolong of life. Surgery remains both the most frequent initial treatment and the most prevalent form of therapy (Monahan, Drake & Neighbors, 1994). Mastectomy is the most common form of surgical treatment and is a very effective strategy in survival. The diagnosis and treatment of cancer are often associated with increased stress level of patients and their families because of the actual and potential changes it imposes. Numerous studies have documented the high prevalence of psychological stress experienced by patients at the time of cancer diagnosis and during early treatment.

Women who are treated by mastectomy are faced with coping and adaptation to the removal of a breast (or part of it) and adjacent tissues. Treatments themselves are threatening because of the discomfort from pain and concern over future. The loss of breast, in most culture, means not only loss of a body part, but also the loss of health, loss of woman's femininity, disfigurement and disgrace. These can be perceived as a crisis and associated with psychological

stress. Some sequelae of mastectomy are both physically compromising and psychologically threatening. Removal of lymphatic tissue in the axillary areas and the pectoral muscles may lead to problems with lymphedema, restricted motion, reduced strength in the affected arm. These conditions may precipitate stress and anxiety which could seriously interfere with a woman's emotional status and may cause her a restriction of the activity. Women's concern with disfigurement may also lead to problems in interpersonal relationship, changes of self esteem and self worth. The shock of a cancer diagnosis and treatment also alters family and other social support systems.

All of the above may increase patient's anxiety and stress. So the effects of treatment of breast cancer on women are not only a biological matter, they involves all the human responses in physiological, psychological and social aspects. Some studies have concluded that there is an important psychological morbidity associated with all operations for primary breast cancer, the emotional suffering out weighs physical pains in mastectomy (Wong & Bramwell, 1992). There are great demands of women with mastectomy to cope with the potential life threatening disease, the disruptions in their psychological well being and physical changes related to the surgery. The coping behaviors that patient can use to reduce stress may be confrontive, emotive or palliative

according to their own characteristics (Jalowiec, Murphy & Powers, 1984). Many studies have found that mastectomy generally is stressful experiences for patients with breast cancer because of the physical and psychosocial factors associated with the disease and the treatments. Coping behaviors vary according to the time since surgery and personal situations. Factors such as family relationship, age, educational background, social-economical background, occupation and past health experience can influence the stress and coping behaviors of the postmastectomy patients. Many studies have been conducted in the western world, but few studies of stress and coping behaviors in postmastectomy patients were found in Chinese literature.

Since psychological factors such as stress and coping have important impacts on the course of the disease, nurses need to understand how the patients and their families experience the disease and its treatment. More detailed exploration of the meaning of mastectomy for breast cancer through the eyes of the sufferers and examination of the stress and coping behavior in postmastectomy patients will provide a prediction of disease progress and prognosis, provide a better understanding of the nature of stress experienced by patients, facilitate planning and provision optimal care for the patients and support to the patients and their families, and finally assist them to live with the

disease and promote health.

Objectives of the study

The objectives of the study were:

1. To identify the stress level of postmastectomy patients.
2. To identify the coping behaviors of postmastectomy patients.
3. To examine the relationship between stress level and coping behaviors of postmastectomy patients.
4. To examine the relationship between stress level and perceived family relationship of post mastectomy patients.
5. To examine the relationship between coping behaviors and perceived family relationship of postmastectomy patients.
6. To examine the relationship between stress level and age of postmastectomy patients.
7. To examine the relationship between coping behaviors and age of postmastectomy patients.

Hypotheses

1. There is a relationship between stress level and coping behaviors of postmastectomy patients.

2. There is a relationship between stress level and perceived family relationship of postmastectomy patients.
3. There is a relationship between stress level and age of postmastectomy patients.
4. There is a relationship between coping behaviors and perceived family relationship of postmastectomy patients.
5. There is a relationship between coping behaviors and age of postmastectomy patients.

Assumptions

The assumptions upon which this study was based included:

1. All persons are bio-psycho-social beings.
2. All patients are under stress in different levels.
3. Stress may be caused and influenced by the diagnosis and treatment of disease which result in changes of body function, body image and life style.
4. Breast cancer as a life threatening disease may cause stress.
5. Women undergone mastectomy experience some degree of changes in body function, body image

and life style.

6. In order to adapt to the changed situation, people must cope.

Limitations

This study was conducted only in Beijing and Tianjin. The generalizability of the study might be limited to the whole population of China. Issue related to the data collection procedure also needs to be considered. The whole procedure took about one hour that made people less concentrated at the end. This may decreased the accuracy of patients' responses.

Significance of the study

Study of the stress and coping behaviors of postmastectomy patients in Beijing and Tianjin will provide nurses a better understanding of patient's bio-psycho-social responses to mastectomy and influencing factors such as family relationship and age. This understanding will facilitate nursing practice, nursing education and nursing management by providing guidance to nurses, patients and their families in helping them to identify their stress and coping behaviors, to enhance positive coping, and to achieve a better progress in long term adaptation and recovery outcomes.

Definition of terms

Stress a response of the body to the demands from 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, which is assessed by the Modified Stress Symptoms of Inventory (MSSI)--A Self Assessment Questionnaire which is partially adapted in part from the Cornell Medical Index (1949).

Coping an adaptive strategy, a method that responses to stressful situations and a process that serves to manage a problem and modulates the emotional response to that problem. Coping behaviors have been characterized as confrontive, evasive, optimistic, fatalistic, emotive, palliative, supportant, and self-reliant and will be measured by Jalowiec Coping Scale (1987).

Postmastectomy Patients a person who has experienced operation of removal of one breast. The operation may be radical mastectomy or modified

radical mastectomy.

**Family
Relationship**

the unique interpersonal interactions existing within family which are perceived by postmastectomy patient. It may present in various forms, for instance, supportive relationship, cohesive relationship, emotive relationship or peaceful relationship. In this study the family relationship of postmastectomy patient is measured by Family Relationship Assessment Questionnaire (FRAQ) developed by the investigator of this study.