#### CHAPTER 1

### INTRODUCTION

# **Background**

Nowadays, the incidence of breast cancer is increasing rapidly. It is the third most common cancer among women, with over half a million new cases in the world each year (Pheby, 2003). In China, the incidence of breast cancer accounted for 10% of female cancers (Wang, 2001). It has increased by 0.7-1.8 percent annually, and a survey of Beijing and other major big cities in China shows that of every 100,000 Chinese women, there will be 34 to 42 women infected by the disease (People's Daily, 2001). Therefore breast cancer is a profound threat to the health and life of Chinese women. Exploring appropriate options to treat the disease is important and required.

The primary treatment of breast cancer especially in Stages I, II or III is surgical removal. Recently, women who are treated for breast cancer frequently undergo modified radical mastectomy (MRM) (Hinman, 2001), a surgical procedure, which removes the entire breast tissue along with axillary lymph nodes. In the early stage of breast cancer, this procedure can cure the cancer completely with no recurrence (Walker, 1995).

The period following the surgery commonly demonstrates an impact on patients' physical health and functioning, psychological/spiritual, socioeconomic, and family life aspects. It manifests as fatigue, chest wall tightness, numbness, lymphedema, reduced upper extremity mobility (particularly in the shoulder joint), arm weakness, difficulty performing household chores, and difficulty lifting objects

(Gantz, 1990; Wingate, 1985), chronic pain, sexual dysfunction; depression, anxiety of body image; avoidance of social activities necessitating exposure of the body, such as athletics or swimming (Meyer & Aspegren, 1989), less work and therefore decreased income, and negative reaction of their husbands when they look at the incision (Northouse, 1989). Thus after surgery, a woman confronts problems, and has to cope with the impacts of the illness and surgery that affect their quality of life (Hinman, 2001; Hoskin, 1997). When at home, self-care is the most common and fundamental form of health care (Geest, 1987; Dean & Hickey, 1986 cited in Conn, 1991). It is mainly practised to restore and maintain a patient's health (Hjelm, Nyberg, Isacsson, & Apelqvist, 1999). Therefore, this study was conducted to determine the levels of self-care of women who have undergone mastectomy.

According to Orem (2001), "self-care is the practice of activities that individuals initiate and perform on their own behalf in maintaining life, health, and well-being". "Self-care is the deliberate use of valid means to control or regulate internal and external factors that affect the smooth activity of a person's own functional and developmental processes or contribute to a person's personal well-being" (p. 43). Self-care agency and therapeutic self-care demand affect the women's self-care performance. Self-care agency is "the complex acquired capability to meet one's continuing requirements for care of self that regulates life processes, maintains or promotes integrity of human structure and functioning and human development, and promotes well-being" (Orem, 2001, p. 254); therapeutic self-care demand signifies "all the care measures necessary to meet existent and emerging self-care requisites of individuals at particular times" (Orem, 2001, p. 25). However, when a person's self-care agency is of a value that is inadequate for their performance of

actions specified by their therapeutic self-care demands, there is a deficit relationship between what persons should do and what they can or will do. This type of relationship is referred to as a self-care deficit, an indicator that persons need help if their self-care requirements are to be met. The internal and external factors also affect the women's self-care performance. The internal and external factors associated with self-care are named as basic conditioning factors in this theory. These include age, gender, developmental state, health state, sociocultural orientation, health care system, pattern of living, environment, and resource availability and adequacy (Orem, 2001). Among them, the researcher considered health state, health care system, and information resources as the significant factors that might be related to self-care of postmastectomy women because: (1) health state has been thought to be an indicator of functional health that might affect patients' abilities to perform selfcare (Dodd & Dibble, 1993) and has had a significant relationship with self-care requisites, self-care agency, and self-care performance (Moore & Pichler, 2000); (2) health care system has been a source of healthcare (Aderson, 2001), which might guide postmastectomy women in choice of treatment alternatives (Gustafson, Hawkins, Boberg, Pingree, Serlin, Graziano, & Chan, 1999); (3) information resources have been an essential component of effective care, might motivate patient to choose healthy behaviors, foster informed participation in treatment decision making (Bilodeau & Degner, 1996), enhance self-efficacy, promote self-care, assist in amelioration of symptoms and decrease anxiety (Mills & Sullivan, 1999).

Based on current literature, research has mostly focused on treatment, prevention, and self-care of women with breast cancer and postmastectomy during hospitalization. There is less information concerning self-care of postmastectomy

women living in their home and the extent to which activity or therapy is used after mastectomy. This study was expected to be beneficial to health care team in enhancing self-care postmastectomy women and providing better services.

# **Objectives**

- 1) To explore levels of self-care among Chinese women who have undergone mastectomy.
- 2) To identify levels of health states, types of health care systems, and levels of adequacy and types of received information resources among Chinese women who have undergone mastectomy.
- 3) To determine the relationships between health state, types of health care systems, adequacy of received information resources and self-care among Chinese women who have undergone mastectomy.

# **Research questions**

- 1) What are the levels of self-care performed by Chinese women who have undergone mastectomy?
- 2) What are the levels of health states, types of health care systems, and levels of adequacy and types of received information resources of Chinese women after mastectomy?
- 3) Are the health states, types of health care systems, and levels of adequacy of received information resources associated with self-care of Chinese women who have undergone mastectomy?

## **Conceptual or theoretical framework**

The theoretical framework of the study was based on four concepts and their relationships. Concepts comprising self-care, health state, health care system and information resources were synthesized as a foundation for the study (see Figure 1-1). Orem's self-care theory of nursing was considered as theoretical framework in this study.

According to Orem's general theory of nursing, self-care was defined as "the practice of activities that individuals initiate and perform on their own behalf in maintaining life, health, and well-being" (Orem, 2001, p. 43). Self-care is also learned, goal-oriented activity of individuals (Orem, 2001, p. 490). When performed effectively, it contributes in specific ways to human structured integrity, human functioning, and human development (Orem, 2001, p. 43). However, when person's self-care agency is inadequate for their performance of actions specified by their therapeutic self-care demands, there is self-care deficit, which indicates that the persons need help to meet their self-care requirements (Orem, 2001).

Breast cancer and mastectomy have led women to consider special actions to meet their requisites to cure, alleviate, control, or prevent unwanted conditions, and promote their health. Based on Orem's general theory of nursing (2001), the actions subsumed seeking appropriate medical assistance, being aware of and attending to the effects and results of mastectomy, choosing use of medically prescribed therapies, and managing side effects of therapies, modifying self-concept (and self-image) in accepting after mastectomy, learning to live with effects of breast cancer and mastectomy and related medical measures. However, self-care may be performed at different levels depending on two major factors. Health state is regarded as internal-

related factor while type of health care system and adequacy of received information resources are viewed as external-related factors. Those factors could influence decision making and self-care performance of women after mastectomy. The theoretical integration of these factors, which form the conceptual framework of this study, is demonstrated in Figure 1-1.

#### **Factors**

## Internal

- Health states
- > Perceived by patients
- > Assessed by professionals

## External

- Type of health care system
- Adequacy of received information resources

# Self-care of women who have undergone mastectomy

- Seeking appropriate medical assistance
- Being aware of & attending to the effects & results of mastectomy
- Choosing use of medically prescribed therapies & managing side effects of therapies
- Modifying self-concept (& self-image)
  in accepting after mastectomy
- Learning to live with effects of breast cancer & mastectomy & related medical measures

Figure 1-1. Conceptual framework of this study

## **Definition of terms**

Self-care of women who have undergone mastectomy refers to actions taken by or for themselves postmastectomy in order to ease pain, speed recovery, aid rehabilitation, or increase health. The actions include seeking appropriate medical assistance, choosing use of medically prescribed therapies and managing side effects of therapies, being aware of and attending to effects and results of mastectomy, modifying self-concept (and self-image), and learning to live with effects of breast cancer and mastectomy and related medical measures. The actions were measured by a Self-Care Questionnaire modified from Hanucharurnkul (1988).

Health states refers to the condition of health evaluated by patients and assessed by professionals. The health states perceived by patients (1) were evaluated by postmastectomy women who could and could not stand in doing the things they wanted to do. Health state was described by a health state rating scale modified from Wan (1999). The health states assessed by professionals (2) referred to postmastectomy women's recent states in physical, psychological, and social activity aspects. These were measured by a questionnaire modified from functional health patterns (Wilson & Giddens, 2001).

Health care system refers to the types of biomedical and alternative health care systems to which postmastectomy women have accessed for care by professionals or others for better health. It was assessed by a health care system questionnaire modified from Montbraind (1990).

Information resources refer to levels of adequacy and types of information related to self-care from various sources which postmastectomy women could access.

These were measured by the Information Resource Questionnaire modified from Cassileth, Zupkis, Sutton-Smith, & March (1980).

# Significance of the study

This study will be helpful to understand the scope and levels of self-care of women who have undergone mastectomy. The study will also guide health professional to offer better services in accordance with individual characteristics based on the relationships between health state, health care system, information resources and self-care of women after mastectomy. The findings also could be useful for the development of intervention in order to promote and maintain health of women after mastectomy. In addition, these should stimulate further study under the concept of self-care.