CHAPTER 1

INTRODUCTION

Background and Significance of the Research Problems

Breast cancer is a major public health problem (Moore, 2001), and the incidence rate of this disease is rising every year. In Asian countries, breast cancer is not as common as in the United States of America, but the incidence rate is still the highest of all women's cancers in some countries such as Korea and the Philippines (Miller et al., 1996).

In Thailand, breast cancer is one of the major causes of women's health problems (National Cancer Institute: NCI, 2001). In 2001, 28 in 100,000 Thai women had breast cancer and it is the third leading cause of death (National Cancer Research Institute, 2001). In Songkhla province, breast cancer is the second most common cancer (Report of Non-communicable Diseases Public Health Office of Songkhla, 2000), and accounted for 16.6% of female cancers (Tumor Registry Cancer Unit of Songklanagarind Hospital, 1999).

To combat breast cancer, early detection is important. As a result of medical advances, one third of all cancers are preventable, and a further one-third, if diagnosed sufficiently early, are curable. For the remaining one-third, appropriate palliative care can bring about substantial improvements in the quality of patients' lives (World Health Organization, 1998). Five-year survival rates for women with breast cancer who receive appropriate treatment are approximately 85% for stage 1,

66% for stage 2, 41% for stage 3, and 10% for stage 4 (Daly & Weiss, 2001).

Hence, breast cancer screening is very important for all women because early detection of this disease means longer lives. There is no certain way to prevent breast cancer or means of curing it, so early detection is the best safeguard (Breast Cancer Research Center, 1999) because the most effective way to lower mortality is early diagnosis (Champion, 1995).

Breast self-examination (BSE) is the most important way for women to detect breast cancer early. Statistics indicate that 80-90% of breast cancer patients who enter hospital are women who find palpable breast lumps by themselves (Frank-Stromborg & Rohan, 1992: Chantavanich, Chongvanich, & Khunrattanaporn, 2001). BSE is a valuable way to decrease the mortality rate of breast cancer but not all women like to practice this. Knowing what factors associated with breast cancer screening practices in women might help in finding ways to convince them to begin this life-saving practice.

According to the literature review, data from the Cumulative Index of Nursing and Allied Health Literature (CINAHL), the MEDLINE database covering the period from 1982 to 2001, and other documents available in Thailand (Appendix G), there have been about 30 research studies regarding factors associated with breast cancer screening practices (BCSP). Several factors associated with BCSP were reported. Some significant factors considered to be associated with BCSP were the women's perception about risk and severity of breast cancer, benefits and barriers of BCSP, age, race, religion, cultural, attitude, belief of breast cancer, cognition and awareness, educational level, marital status, socioeconomic status, income, insurance, family history of cancer or breast cancer, knowledge, having been taught BSE, physician's recommendation, information, health belief and practice related to BSE,

receiving information sources, family encouragement, and social encouragement (Appendix G). However, most of the studies were conducted in other countries than Thailand.

In Thailand, there was a study that examined factors influencing the practice of BSE and frequency of BSE among 100 nurses, 100 outpatients from a breast unit, and 100 outpatients from the general unit in Siriraj Hospital who were aged 30-39 years when receiving information, perceived barriers of BSE, having breast disease, and perceived susceptibility to breast cancer. It was found that more nurses performed BSE than outpatients from the breast unit and from the general unit. The number of women who practiced BSE regularly was low (17.3%) and the number of women who had not performed BSE in the previous year was about 32.3% (Kengkhetkit, Rabieb, & Aemruksa, 1999). Another study found that women receiving hormone replacement therapy from a menopausal clinic of Maharaj Nakorn Chiangmai Hospital, Thailand, had positive attitudes toward BSE, perceived support from significant others' on their BSE, and tended to perform BSE. The attitudes and subjective norms together could predict 17% of intentions to perform BSE because these two predictors can lead women to perceive the benefits of BSE (Chupradit, 2000). However, those studies suggested further study to confirm which factors determine breast cancer screening practices by using the Health Belief Model (HBM) framework and sequential data collection to avoid the confusing effects of each variable. Another suggestion was to explore the reasons why women perform or do not perform breast cancer screening practices and the attitudes towards breast cancer screening practices in different groups of women such as students, women who work in industry, and women in fitness centers who are healthy.

Thus, an important health issue which nurses should pay more attention to is "why women do not comply with breast cancer screening practices regularly", especially healthy women. A nurse is a valuable person who provides health education and encourages women to perform breast cancer-screening practices. The most significant information to help nurses to give advice and encourage women to co-operate more with effective breast cancer screening practices is to identify factors affecting breast cancer screening practices (Leirman, Young, Kasprzyk, & Benoliel, 1990). There is a need to explore the attitudes of women in southern Thailard, where the researcher believes that there may be cultural differences affecting breast cancer screening practices. In Songkhla, there are Thai-Muslim women and Thai-Buddhist women, who may have different cultural idea, educational levels, beliefs, and traditional backgrounds. It is therefore important to explore factors associated with breast cancer screening practices in southern Thai women in order to provide better strategies to promote breast cancer screening practices.

In addition, the government policy in the 9th Plan (2002-2006) has focused on health promotion, disease prevention and early detection rather than curing. The Public Health Ministry of Thailand also concentrates more on good health than ill health. To develop good health, better understanding about factors associated with breast cancer screening practices is necessary for nurses to develop a guideline or plan for health care teams to promote good breast cancer screening practices in healthy women, especially southern Thai women.

Research Objectives

The objectives of this study were:

- 1) To identify factors associated with breast cancer-screening practices.
- 2) To determine the frequency of healthy women who perform breast cancerscreening practices.

Research questions

- 1) What are the factors associated with breast cancer screening practices in healthy women?
 - 2) How many healthy women do perform breast cancer screening practices?

Scope of the study

The study was aimed at exploring and identifying factors related to breast cancer screening practices among healthy women in southern Thailand. The subjects in this study were healthy women who visited their relatives or friends who are the patients in Songkhla Hospital. Three-hundred subjects were selected using random sampling. Face-to face interviews were used to collect the data.

Conceptual framework

The conceptual framework used in this study was constructed from parts of the Health Belief Model (HBM) developed by Strecher and Rosenstock (1997) who assert that individuals will take action to screen for, or to control, an ill-health condition if they regard themselves as susceptible to the condition, if they see this problem as a serious one, if they believe that a course of action available to them would be beneficial in reducing either their susceptibility to or the severity of the condition, and if they believe that the anticipated barriers to (or costs of) taking the action are outweighed by its benefits (Strecher & Rosenstock, 1997). The three major components of the HBM are 1) individual perceptions, 2) modifying factors, and 3) cues to action.

The individual perceptions consist of four concepts: perceived 'risk and perceived severity of breast cancer, and perceived benefits and perceived barriers of breast cancer screening practices. The modifying factors include age, religion, educational level, income, and knowledge about breast cancer and breast cancer screening practices. Cues to action include physician's recommendation, family history of cancer or breast cancer, receiving information resources, and family and social encouragement.

Those three factors, which associated with breast cancer screening practices, were therefore essential elements to consider when constructing a framework for this study (Fig.1).

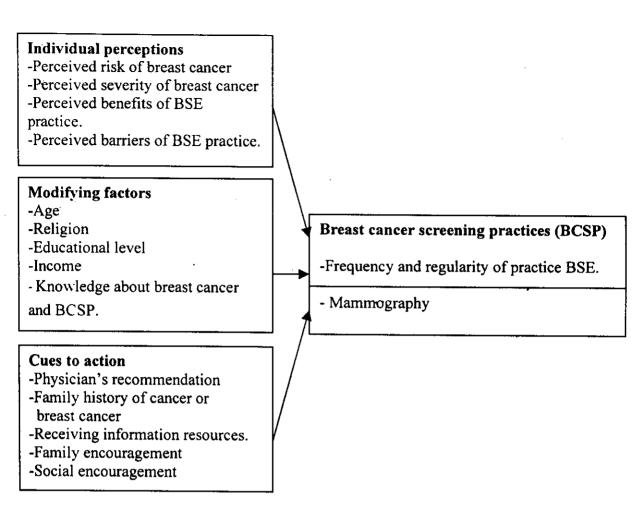


Figure 1. Research framework of the study.

Operational Definitions

1. Factors refer to any things that are associated with breast cancer screening practices. In this study, there were three main factors, namely 1) individual perceptions (perceived risk and perceived severity of breast cancer, perceived benefits and perceived barriers of breast cancer screening practices), 2) modifying factors (age, religion, educational level, income, and knowledge about breast cancer and BCSP, and 3) Cues to action (physician's recommendation, family history of cancer or breast cancer, receiving information resources, family encouragement, and social encouragement). A questionnaire was developed to measure these factors by using the HBM (Strecher & Rosenstock, 1997) and the literature review.

- 2. Breast cancer screening practices (BCSP) were defined as examinations intended to find breast cancer as early as possible. In this study, two major activities were measured: (1) BSE used as a main mode of practice by looking at frequency and regularity of practice, and (2) mammography, by looking at the intention to have a mammography, which is counted as an early detection procedure.
- 3. Breast self-examination (BSE) is a technique of breast cancer detection by using the fingers to examine the breasts physically or by palpation. In this study the frequency and regularity of practice of BSE performed by women themselves was evaluated.
- 4. Intention to have a mammography was defined as a woman's thought or plan to have a mammography in the current year due to the belief that mammography is useful and then they want to have it done.
- 5. **Healthy women** were defined as women aged 20 to 60 years old, who had no obvious health problems, and were carrying out their normal duties or were healthy by their perceptions.

Significance of the Study

- 1. This study provides a better understanding about factors associated with breast cancer screening practices in healthy women in Songkhla, southern Thailand. These factors provide guidelines for encouraging women to perform BCSP.
- 2. The research findings explain knowledge about the factors associated with BCSP in healthy women as an aspect of HBM. It is also be use to apply for health education to encourage BCSP among healthy women.

- 3. The research findings can be used as a reference to develop further studies related to BCSP.
- 4. The subjects received a lot of information related to breast cancer disease, BSE and mammography from the researcher after completing the questionnaire. The subjects were provided with an opportunity to discuss or ask any questions related to BCSP for a clear message.

Limitations of the Study

There are some limitations to this study. Firstly, women were less likely to know or understand the word "mammography", which required explanation for clear understanding. Secondly, there were few women who had a mammography, so it was impossible to find an association between selected factors and mammography. Hence, the researcher assessed the association between selected factors and intention to do mammography in this year instead.