

# THE RELATED RISK FACTORS AND SELF-EFFICACY OF WOMEN TO PREVENT BREAST CANCER

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## ABSTRACT

The study aims to survey the determinants of breast cancer risks and association between the determinant factors and self-efficacy among women to prevent breast cancer. The study samples were 100 randomly selected women who were more than 35 years old and lived in Dusit District, Bangkok in 2014. Data were collected from constructed questionnaires with 5-Likert scales of very high, high, moderate, low and least. The questionnaires were verified the content validity with reliability coefficient of 0.7. Data were analyzed by descriptive statistics : frequency, percentage, standard deviation (SD), Pearson Correlation and Chi square. The results showed there were 27 samples (27%) who were 31-40 years old, 25 samples (25%) who were 71-80 years old. 27% of the samples completed primary schools, 42% had occupation as trade, 57% were married, 88% had income of 20001-30000 Baht per year, 93% had no family history of cancer, 99% had no history of contraception, 69% had source of information from health personnel and 99% did not have regular self-breast examination. Self-efficacy among women to prevent breast cancer were associated with age, marital status, education level and source of information.

Keywords- Self-efficacy, women, breast cancer

## INTRODUCTION

One of the major health problems in every country is cancer. World Health Organization (WHO) has predicted that all types of cancer will be double in the next 20 years and the incidence of cancer will be 68 per 100,000 population/year. (Jirapan Srithamee, et al, 2010) The mortality rate of breast cancer among Thai women are 81.4, 83.1 and 84.9 per 100,000 population in 2005, 2006 and 2007 respectively. (Office of Policy and Strategy, MOPH 2008) The ratio of breast cancer is 1 in 9 among women with cancers. Bangkok has the highest incidence of breast cancer of 28.6 per 100,000 population (National Cancer Institute, 2015).

Breast cancer remains a major public health problem. The incidence is rising in most countries and is projected to rise further over the next 20 years despite current efforts to prevent the disease. The increased incidence is not surprising since there has been, in most countries, an increase in numbers of women with major breast cancer risk factors, including lower age of menarche, late age of first pregnancy, fewer pregnancies, shorter or no periods of breastfeeding, and a later menopause. Other risk factors which add to the burden of breast cancer are the increase in obesity, alcohol consumption, inactivity, and hormone replacement therapy (HRT).

Which is in accordance with the mortality rate from pilot study which showed the women, who were more than 35 years old in Dusit District Bangkok, did not have breast cancer screening by any methods. The researchers are interested in self-efficacy for health promotion among women to prevent Breast cancer. Self-efficacy and result expectation will lead to health behavior of self breast examination to prevent breast cancer and plan to promote breast cancer education and self breast examination.

## MANUSCRIPT STRUCTURE

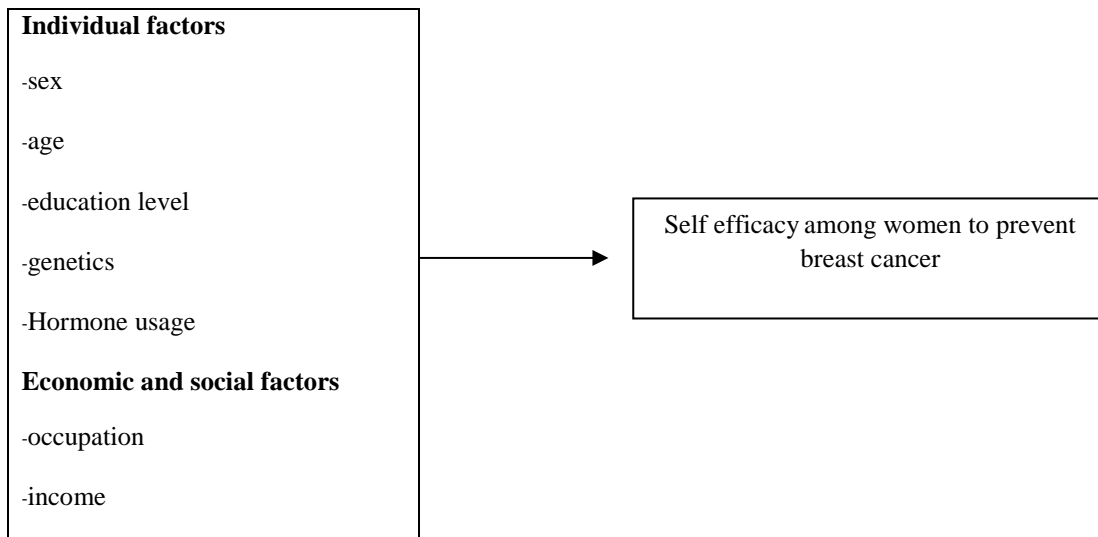
### Objectives

1. to study the related of breast cancer risks among women
2. to study the association between the related factors and self-efficacy among women to prevent breast cancer.

## METHODS

No restriction criteria for participation was imposed, and as all the women included in each registry were invited to participate. Each woman was mailed either a concealed flyer or postcard inviting them to take part in the study by accessing the questionnaire on line, or requesting that a hard copy be mailed to them which they would then return anonymously. Each piece of mail had a randomly generated and untracked unique key code attached to it. The purpose of the code was to help tracking where each participant completing the survey was geographically located, and as well ensure that each woman who accessed the website to respond to the questionnaire only did so once. Population and samples 100 randomly selected women from 3 communities in Dusit District, Bangkok in 2014. This study is a descriptive research to study determinants of breast cancer risks among women and to determine the determinant factors associated with self-efficacy to prevent breast cancer among women in communities in Dusit District, Bangkok. Data are collected from constructed questionnaires by the researchers and they are verified for content validity by 3 experts. The questionnaires have 5-Likert scales of very high, high, moderate, small and least. They have coefficient of reliability of 0.7. Statistics Quantitative data are analyzed by descriptive statistics: frequency, percentage, standard deviation (SD), Pearson Correlation and Chi square.

### Conceptual Framework



## RESULTS

**Table 1**

**Numbers and percent of samples by family history of cancer**

Family history of cancer	Number (person) (N=100)	Percent
Yes	12	12.00
No	88	88.00
<b>Total</b>	<b>100</b>	<b>100</b>

Data analysis shows most samples of 88 persons (88.00%) do not have family history of cancer and 12 samples (12.00%) have family history of cancer.

**Table 2**  
**Numbers and percent of samples by source information**

<b>Source of information</b>	<b>Number (person)</b> (N=100)	<b>Percent</b>
Newspaper	4	4.00
Neighbors	3	3.00
Relatives	4	4.00
Television	19	19.00
Health personnel	69	69.00
<b>Total</b>	<b>100</b>	<b>100</b>

Data analysis shows most samples of 69 samples (69.00%) have source of information from health personnel, 19 samples (19.00%) receive from television and 3 samples (3.00%) receive from neighbors.

**Table 3**  
**Numbers and percent of samples by history of contraception**

<b>History of contraception</b>	<b>Number (person)</b> (N=100)	<b>Percent</b>
Yes	7	7.00
No	93	93.00
<b>Total</b>	<b>100</b>	<b>100</b>

Data analysis shows most samples of 93 persons (93.00%) do not have history of contraception and 7 samples (7.00%) have history of contraception.

**Table 4**  
**Numbers and percent of samples by history of hormone usage**

<b>History of hormone usage</b>	<b>Number (person)</b> (N=100)	<b>Percent</b>
Yes	1	1.00
No	99	99.00
<b>Total</b>	<b>100</b>	<b>100</b>

Data analysis shows most samples of 99 persons (99.00%) do not have history of hormone usage and only 1 samples (1.00%) have history of hormone usage.

**Table 5**  
**Numbers and percent of samples by self-breast examination**

<b>Self-breast examination</b> (N=100)	<b>Number (person)</b>	<b>Percent</b>
No	1	1.00
Yes, regularly	-	-
Yes, not regularly	99	99.00
<b>Total</b>	<b>100</b>	<b>100</b>

Data analysis shows most samples of 99 persons (99.00%) have self-breast examination but not regularly and only 1 samples (1.00%) never has self-breast examination

**Table 6**  
**Association of self-efficacy and age**

	<b>Mean</b>	<b>SD</b>	<b>Pearson Correlation</b>	<b>p-value</b>
Age	48.46	14.63	.224	.025
Self-efficacy				

Data analysis shows statistically significant association between age and self-efficacy ( $p < 0.05$ ).

**Table 7**  
**Association between self-efficacy and marital status**

	<b>Chi- Squares</b>	<b>df</b>	<b>p-value</b>
Marital status	102.20	4	.00
Self-efficacy	102.96	3	.00

Data analysis shows statistically significant association between marital status and self-efficacy ( $p < 0.05$ )

**Table 8**  
**Association between self-efficacy and education level**

	<b>Chi- Squares</b>	<b>df</b>	<b>p-value</b>
Education level	43.36	6	.00
Self-efficacy	56.06	3	.00

Data analysis shows statistically significant association between education level and self-efficacy ( $p < 0.05$ )

**Table 9**

**Association between self-efficacy and source of information**

	Chi-Squares	df	p-value
Source of information	209.84	5	.00
Self-efficacy	56.06	2	.00

Data analysis shows statistically significant association between source of information and self-efficacy (p<0.05)

**CONCLUSION**

The study of determinants of breast cancer risks and association between the determinant factors and self-efficacy among women to prevent breast cancer in 100 randomly selected women who were more than 35 years old and lived in Dusit District, Bangkok in 2014 showed that there were 27 women (27%) who were 31-40 years old, 25 women (25%) who were 71-80 years old. 27% of them completed primary schools, 42% had occupation as trade, 57% were married, 88% had income of 20001-30000 Baht per year, 93% had no family history of cancer, 99% had no history of hormonal contraception, 69% had source of information from health personnel and 99% did not have regular self-breast examination. Self-efficacy among women to prevent breast cancer were associated with age, marital status, education level and source of information. One conclusion of this review is that the application of measures that are already available, such as chemoprevention and lifestyle prevention, would result in appreciable reductions in breast cancer risk. A second conclusion is that the pace of advance of our understanding of the biology of breast cancer risk and development is highly likely to give rise to new avenues for prevention over the next 10 years. A major problem is applying what we already know concerning the efficacy of prevention to appropriate populations of women. To apply chemoprevention, we need to have measures in place to assess risk and to explain the pros and cons of treatment and for prescription of appropriate therapies. Lifestyle change is a population problem which involves publicity concerning its risks and benefits of change and providing mechanisms to support women in their choices throughout society as highlighted of Medicine documents.

**DISCUSSION**

The result showed that most of the women had breast cancer risks in genetics and less usage of hormonal contraception. They also had risk of breast screening behavior even though they received information from health personnel. Regular breast screening could reduce severity of breast cancer if it was detected early, therefore we should encourage health promotion for women to have regular breast cancer screening and search for models of sustainability. We found that in order to enhance self-efficacy among women to prevent breast cancer, factors of age, marital status, education level and source of information should be considered since perceived self-efficacy and personal expectation result in sustainable behavior. With this study we examined knowledge and prevention practices among breast cancer survivors, as well as how knowledge impacted their involvement with medical treatment. Knowledge of breast cancer, screening with regular mammograms and breast self-exams are expected to be associated with earlier decision to seek medical care and earlier stage of breast cancer at initial diagnosis. Other interesting differences between black and white women were the fact that compassion of the health professional was rated lower by black versus white women, and so was the contribution of the physician to increasing the woman's knowledge on breast cancer. A study among low-income minorities showed a significant association of patient self-efficacy and physician emotional support with breast cancer knowledge; physician emotional support appeared to be more important than physician informational support.

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