Relationship of Knowledge in Women Age 25-50 Years in RW 05 Cibubur, East Jakarta on BSE Knowledge as Early Detection of Breast Cancer

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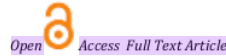
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Abstract

In Indonesia, based on Indonesia's Health Profile 2008, the top 10 major malignant neoplasm disease or cancer inpatients at the hospital since 2004-2008 has not changed much. The first rating is breast malignant neoplasm or breast cancer. Society rarely knows that it is important to perform BSE (breast self-examination) early, which can help reduce the incidence of morbidity or mortality of breast cancer patients. The purpose of this study was to determine the relationship between knowledge in women aged 25-50 years in RW 05 Cibubur, East Jakarta, on BSE as early detection of breast cancer. This research employed an analytic survey with the cross-sectional approach. The employed technique in sampling was simple random sampling. It was done with the lottery technique to population members. The results of the 207 respondents showed that respondents with bad BSE knowledge were 100 people (48.3%) and respondents with good knowledge were 107 (51.7%). The respondents who practiced the BSE were 95 (45.9%), and the respondents who did not were 112 people (54.1%). The statistical test results had a very strong correlation with the value of 0.832 and correlated with the statistical value of 0.000.

Keywords: Breast Cancer, Knowledge, BSE (Breast Self-Examination), Women Aged 25-50 Years at RW 05 Cibubur East Jakarta.

INTRODUCTION

Cancer is still a scary thing for the people of Indonesia. The wrong perception about this disease is still a major obstacle in dealing with this disease. Society still perceives cancer as a deadly disease that cannot be cured and cannot be prevented and requires high costs for its treatment [1]. Cancer is a non-communicable disease that is a public health problem globally and in Indonesia. In the world, 12% of all deaths are caused by cancer and the number 2 killer after cardiovascular disease (MOH 2010) [2]. In Indonesia, the prevalence of tumors/cancer is 4.3 per 1000 population. Cancer is the number 7 cause of death (5.7%) after stroke, tuberculosis (TB), hypertension, injury, perinatal, and diabetes mellitus (DM) (RISKESDAS, 2007) [3].

Breast cancer is the most common cancer worldwide. This disease only affects women, but the comparison with men is about 1:1 cases [1]. Breast cancer also known as carcinoma mammae is a malignancy in the breast tissue with various biological subtypes, origins, and pathological features grouped into various groups that produce response patterns and clinical features to a given therapy.

GLOBOCAN, through the International Agency for Research on Cancer (IARC) in 2018, the incidence of new cancer cases reached 18,078,957 cases with breast cancer occupying second place as the newest cases with a total of 2,088,849 cases (11.6%) after lung cancer. Asia is the most significant contributor to the incidence of breast cancer in the world, with 911,014 (43.6%). In Southeast Asia, the incidence of breast cancer is the highest (270,401 (13.5%)) when compared to the incidence of other types of cancer [4; 5; 6].

In Indonesia, based on the Health Profile of the Republic of Indonesia in 2008, the ten main rankings of malignant neoplasms or cancers in hospitalized patients from 2004-2008 have not changed much. The three main stages are malignant neoplasms of the breast, followed by malignant neoplasms of the uterine cervix and malignant neoplasms of the liver and intrahepatic tract. Breast cancer continued to increase during those four years with an incidence of 5,297 cases in 2004, 7,850 cases in 2005, 8,328 cases in 2006, and 8,277 cases in 2007 (Depkes RI, 2008) [7, 8].

Based on data from the Hospital Information System (SIRS) 2010, breast cancer is the highest cancer prevalence in women, with 12,014 cases (28.7%) of breast cancer hospitalization, followed by cervical cancer and leukemia [9]. In

addition, the prevalence of cancer in Indonesia is quite high. Based on basic health research (2013), 1.4 per 1000 or about 330,000 people have cancer [10]. Cervical and breast cancer were cancers with the highest prevalence in Indonesia in 2013, namely cervical cancer at 0.8% and breast cancer at 0.5%. The highest prevalence of breast cancer is in the province of DI. Yogyakarta, which is 2.4%. Based on data from the Installation for Early Detection and Health Promotion at the Darmais Cancer Hospital, 2010-2013, it was stated that the most cancers in Darmais Cancer Hospital for four consecutive years were breast cancer. And the number of new cases and the number of deaths from cancer continues to increase. In addition, the incidence of breast cancer in DKI Jakarta is 0.8% or around 3,946 patients, which is also high [11]. The high mortality rate of breast cancer is caused by breast cancer patients coming to health services in an advanced stage and is difficult to cure [12].

The incidence of breast cancer increases with age. Breast cancer before the age of 20 is isolated and rarely before 30. After that, however, the incidence gradually increased, mostly at the age of 35-50 years (Moore, 2008). In the United States, approximately 75% of women with breast cancer are over 50 years of age, and only 5% are 40 years old [5].

A survey conducted by the Jakarta Breast Health Foundation in 2009 showed that 80% of the public did not understand the importance of early breast examination. Only 11.5% understand. It is compounded by the fear of having their breasts removed to the point of paying expensive medical fees so that many patients delay their arrival to health care facilities by choosing to seek alternative treatment [13].

People rarely know that the importance of doing BSE (breast self-examination) early can help reduce the incidence of morbidity or mortality in breast cancer patients. Ignorance of the community can be due to a lack of knowledge gained during school or general knowledge such as reading or lack of counseling carried out by agencies in the environment such as at the home environment level, namely RT, RW, Kelurahan or health institutions such as health centers in the neighborhood where they live. Lack of education and general knowledge about breast cancer makes people assume breast cancer and do not do BSE as a form of prevention, so that breast cancer is known before it becomes severe or at an advanced stage.

To detect the presence of breast cancer can be done with BSE. This measure is very important because almost 85% of lumps in the breast are found by the patient herself [14]. In normal women, the American Cancer Society recommends women aged 20 years to do BSE every month, age 35-40 years old to have mammography, over 40 years to have a check-up at a specialist, more than 50 years to have regular check-ups and mammography every year, and women who are at high risk to have more frequent and routine check-ups by a doctor. The purpose of the BSE program on breast cancer is to reduce mortality in patients because cancer found at an early stage certainly provides a longer life expectancy than those found at an advanced stage [15; 16]. Breast changes that can be observed when doing BSE are changes in the breast skin's shape, size, and contour. Prevention is carried out starting at the age of 20 years is also recommended by the American Cancer Society.

BSE is also recommended by the Republic of Indonesia Ministry of Health because the examination is easy and does not require a fee to reach all circles. Besides, BSE is also comfortable because it is done alone without the help of others. Although it is easy and can be done by themselves, the community must also know how to do it, and this is the role of education to provide general knowledge and health agencies to inform the public. So that BSE is easy, and early breast cancer detection can be done in all circles.

Based on the data above, the researcher is interested in examining the relationship between knowledge of women aged 25-50 years in RW 05 Cibubur, East Jakarta, on BSE as early detection of breast cancer. The formulation of the research problem is "Is there a relationship between knowledge of women aged 25-50 years in RW 05 Cibubur, East Jakarta to BSE as an early detection of breast cancer?" with the aim of the study, namely to determine the relationship between knowledge in women aged 25-50 years in RW 05 Cibubur, East Jakarta to BSE as early detection of breast cancer.

LITERATURE REVIEW

Knowledge is the result of "knowing", which occurs after people have sensed a certain object. Sensing occurs through the five human senses, namely sight, hearing, smell, taste and touch. Most of the human knowledge is obtained through the eyes and ears. Knowledge is a very important domain for the formation of one's actions. Based on experience and research, behavior based on knowledge will be more lasting than behavior that is not based on knowledge. The knowledge covered in the cognitive domain has six levels, namely to know, to comprehend, to apply, to analyze, to synthesize, and to evaluate [17].

The breasts or mammary glands are modified, granular skin structures on the anterior part of the thorax in women containing elements that secrete milk for infant feeding. Mammae or mammary glands in women are complex tubuloalveolar glands consisting of 15 to 25 lobes that run radically towards the nipple and are separated by adipose tissue, and each lobe has an excretory (lactiferous) duct that opens at the nipple. Each lobe is subdivided into lobules, with the alveolar ducts and alveoli being the secretory portions of the gland.

The histological structure of the breast varies according to sex, age, and physiological status. Each breast gland consists of 15-25 lobes of the tubuloalveolar complex type, which secretes milk for the neonate. Each lobe, separated from the other by dense connective tissue and adipose tissue, is a separate gland with its lactiferous excretory duct. This 2-4.5 cm long duct opens into the mammary papilla, which has 15-25 openings, each 0.5 mm in diameter.

Before puberty, the mammary gland consists of the lactiferous sinus and several branches of this sinus, the lactiferous ducts. In girls during puberty, the breasts enlarge and form prominent nipples. In boys, the mammary glands remain flat. Breast enlargement during puberty occurs due to the accumulation of adipose and connective tissue, with increased growth and branching of the lactiferous ducts due to increased ovarian estrogen levels.

Adult females' characteristic glandular structures – lobes – develop in the smallest end ducts. A lobe consists of several ducts that open into one terminal duct. Each lobe is contained in loose connective tissue—a less dense and less cellular connective tissue, separating the lobes. Close to the mouth of the mammary papilla, the lactiferous duct becomes wide and becomes the lactiferous sinus. The lactiferous sinuses are lined with a simple squamous epithelium at their outer opening. This epithelium changes to the stratified cylindrical or cuboidal epithelium. The lining of the lactiferous ducts and terminal ducts is the simple cuboidal epithelium and is covered by overlapping myoepithelial cells. The connective tissue surrounding the alveoli contains many lymphocytes and plasma cells. The population of plasma cells increases significantly towards the end of pregnancy, and these cells function to secrete immunoglobulins (secretory IgA) which provide passive immunity in neonates.

The histological structure of these glands undergoes slight changes during the menstrual cycle for example, the proliferation of ductal cells around the time of ovulation. This change coincides with the time when circulating estrogen levels peak. The increase in connective tissue fluid in the pre-menstrual phase increases breast size.

The mammary papillae (nipple) are conical in shape, maybe pink, light brown, or dark brown. The outer part of these papillae is covered by stratified squamous epithelium with a layer of horn that is in direct contact with the nearby skin, and the skin around the nipple forms the mammary areola. The nipple epithelium is above a layer of connective tissue that contains many smooth muscle fibers. These fibers are arranged around the deeper lactiferous ducts parallel to this duct, where it enters the nipple. The nipple is heavily innervated by sensory nerve endings [18].

Breast cancer also called carcinoma mammae is a malignant tumor that grows in the breast tissue. These tumors can grow in the mammary glands, breast ducts, adipose tissue or connective tissue in the breast. The exact cause of breast cancer is not known. It should be noted that the incidence of breast cancer increases with age [19]. Many risk factors that modify a woman's likelihood of developing this form of cancer have been identified, some confirmed and some less certain (if possible) the relative risk of each.

Early detection of cancer is an attempt to identify a disease or disorder that is not clinically clear by using certain tests, examinations or procedures that can be used quickly to distinguish people who appear to be healthy, really healthy from looking healthy but suffering from a disorder [20]. In planning prevention and screening programs, nurses use information about specific populations to increase the success of breast cancer prevention programs [21].

Early detection aims to find early, i.e. cancer that can still be cured, to reduce cancer morbidity and mortality. Cancer detection is based on the following facts: a) The course of cancer generally starts from cancer in situ or local cancer at the cellular or organ level; b) The number of cancer cases that arise from tumors or precancerous lesions that have long existed; c) More than 75% of cancer cases are found in organs or places that are easily examined so that they are easy to find; d) Cancer patients generally only come to the doctor after the disease is in an advanced stage; e) The results of early stage cancer treatment are much better than the advanced stage. Early cancer can be cured, and cancer at an advanced stage is difficult to cure or can not be cured anymore. The earlier the cancer is found and treated, the better the prognosis. Treatment of benign tumors and precancerous lesions can prevent cancer and is the primary prevention of cancer, and f) Spontaneous cure of cancer rarely occurs. Screening efforts to detect cancer early usually focus on cancers with the highest incidence or those with better survival rates if diagnosed earlier [22].

The types of early detection can be classified as follows: a) Breast Self-Examination (BSE); b) Breast thermography, c) Mammography; d) Ductography; e) Breast biopsy; f) Breast ultrasound, and g) Clinical Breast Examination (CBE). Breasts for women symbolize beauty, femininity, sexuality and motherhood. Abnormalities in the breast that are detected early will help diagnose and provide appropriate therapy—an easy, inexpensive and time-consuming way to detect abnormalities in breast self-examination (BSE).

Breast self-examination (BSE) is a procedure to find abnormalities in the breasts by conducting periodic inspections carried out after menstruation. The purpose of BSE is to detect any abnormalities in the breast structure,

shape or texture. BSE can be done by a woman independently or with the help of a doctor. A woman does BSE because she suspects something in her breasts and observes any changes through the mirror use. BSE should be performed monthly to determine changes in breast tissue, discharge from the nipples or onset of pain in the breast area.

BSE is one of the important steps to identify early-stage breast tumors. Regular examination of BSE can prevent women from severe breast cancer morbidity and mortality. The benefit of breast self-examination (BSE) is to detect any abnormalities in the breasts of women of childbearing age as early as possible. Every woman has a different shape and size of the breast. If women check their breasts regularly every month after menstruation, women can feel how normal breasts are so that if there are changes, women can know them easily.

The weakness of the BSE examination is that it can only detect early and does not prevent breast cancer. Some women assume that BSE is unnecessary because it will not prevent breast cancer. So it is very important to emphasize that the benefit of BSE is in the final result, which means that with the discovery of early-stage breast cancer, the chance to recover will be greater.

How to do BSE- The American cancer society recommends that women aged 20 years or older self-examine their breasts every month. The best time to examine the breasts is 7-10 days after the onset of menstruation when the swelling and tenderness of the breasts have subsided. Women who have gone through menopause should do a breast self-examination (BSE) regularly once a month at a time, according to their wishes. Women who cannot perform BSE examinations are menstruating, pregnant and breastfeeding. In menstruating, pregnant and lactating women, there is the enlargement of the breast glands, which causes lumps to appear. This lump may be considered an abnormal lump by the examiner. Lumps in pregnant and lactating women are normal lumps because they do not occur due to abnormal cell changes [23].

The steps for doing BSE include a) Standing in front of a mirror with the chest exposed upper body. Arms down, compare the left and right breasts, the bottom line, the same size and the same height. The left and right nipples (papilla mammae) are the same height, size and shape; b) Stand in front of the mirror. Look at both breasts for any unusual possibilities, such as nipple discharge, puckering, pulling or peeling the skin. The next two steps are carried out to determine possible changes in the shape and flexibility of the breast. When doing it, it should be with the feeling of hardened chest muscles; c) Pay more attention to the mirror, cup your hands behind your head and press your hands forward. Arms above head, compare left and right breasts, shape and nipples, sometimes in this motion a tumor (cancer) lump can also be seen moving under the skin; d) Then, gently pressing your hands on your hips, bend slightly towards the mirror while pulling your shoulders and elbows forward; e) Raise the left arm, use 3-4 fingers of the right hand to examine the left breast gently, carefully and thoroughly. Starting at the outer edge, press your fingertips into small circles and gently move the circles around your breasts. Gradually work towards the nipple. Be sure to cover the entire breast. Pay special attention to the area between the breast and the armpit, including the armpit itself. Feel for any unusual lumps or lumps under the skin; f) Gently massage the nipple and see any discharge. Do the same for the right breast. If there is any discharge from the nipple during or not during BSE, immediately do further examination; g,) Steps 4 and 5 should be repeated lying down. Lie down with your left arm behind your head and place a pillow or folded towel under your shoulder. This position

causes the breasts to become flattered and makes examination easier.

RESEARCH METHOD

This research is analytic survey research in which research tries to explore how and why health phenomena occur. The research design used is a cross-sectional design where data collection on several research variables is carried out at one time. This study was used to determine whether there is a relationship between the knowledge of women aged 25-50 years in the Cibubur area, East Jakarta, on BSE as early detection of breast cancer. The subjects of this study were all women aged 25-50 years in the Cibubur area, East Jakarta. The research location was held in RW 05, which includes RT 1-18, located in Cibubur Village, Ciracas District, East Jakarta. The time of the study was 1-12 November 2016. The population in this study were all women aged 20-50 years living in the RW 05 area, which includes RT 1-18 located in Cibubur Village, Ciracas District, East Jakarta. There are 431 populations in the RW 05 area. The sample size will be calculated using the Slovin (1960) formula, 207 samples. The technique used in sampling is random sampling, simple random sampling. Every member or unit of the population has an equal chance of being selected as a sample. Researchers took the method by drawing population members (lottery technique). Data was collected by filling out a questionnaire (questionnaire) containing questions in sequence and given to respondents from house to house. The research instrument used is a questionnaire sheet. The data obtained will be processed using a computer with the help of special software, namely SPSS. The following are the steps for processing data through coding, editing, entry and cleaning. The univariate analysis aims to explain or describe the characteristics of each variable. In general, this analysis only produces a frequency distribution of respondents based on age, gender, education level, etc. If you have done a univariate analysis, the results are known for each variable distribution, and bivariate analysis can be done—bivariate analysis conducted on two variables suspected to be related or correlated.

RESULT AND DISCUSSION

Table 1: *Reliability Statistics*

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.722	.770	36

The researcher used a questionnaire as a research instrument. Before conducting the research, the questionnaire was tested for validity using the IBM STATISTIK 23 (SPSS) program. The result of Cronbach's alpha is 0.770. This value has met the minimum requirement of 0.62 to circulate the questionnaire to respondents.

Table 2: Statistics

		Respondents' Age	Respondents' Job	Last education	Knowledge level
N	Valid	207	207	207	207
	Missing	0	0	0	0

Research respondents amounted to 207 people. And in univariate analysis, there is no missing or missing data.

a. **Univariate Analysis**

Table 3: Age of Respondents

		Frequency	%	Valid %	Cumulative %
Valid	25-30 Years	22	10.6	10.6	10.6
	31-35 Years	38	18.4	18.4	29.0
	36–40 Years	78	37.7	37.7	66.7
	41-45 Years	48	23.2	23.2	89.9
	46-50 Years	21	10.1	10.1	100.0
	Total	207	100.0	100.0	

In table 3, the univariate analysis obtained data, namely the age of the respondents who were divided as follows: 22 people aged 25-30 years (10.6%), 31-35 years old totaled 38 people (18.4%), 36-40 years old are 78 people (37.7%), 41-45 years old are 48 people (23.2%), 46-50 years old are 21 people (10.1%)

Table 4: Respondents' Occupation

		Frequency	%	Valid%	Cumulative %
	civil servant	8	3.9	3.9	3.9
	Private employees	44	21.3	21.3	25.1
	Housewife	134	64.7	64.7	89.9
Valid	Doctor	1	.5	.5	90.3
	others	20	9.7	9.7	100.0
	Total	207	100.0	100.0	

Table 4 contains details of the respondents' occupations which are divided by: Civil Servants (PNS) totaling eight people (3.9%), private employees totaling 44 people (21.3%), housewives totaling 134 people (64.7 %), doctors amounted to 1 person (0.5%), and others amounted to 20 people (9.7%).

Table 5: Last Education

		Frequency	%	Valid %	Cumulative %
	Primary School	1	.5	.5	.5
	Junior High School	16	7.7	7.7	8.2
	Senior High School	160	77.3	77.3	85.5
Valid	Diploma	2	1.0	1.0	86.5
	Bachelor	28	13.5	13.5	100.0
	Total	207	100.0	100.0	

Table 5 contains details of the respondent's latest education, namely: Primary School totaling one person (0.5%), Junior High School totaling 16 people (7.7%), Senior High School totaling 160 people (77.3%), Diploma totaling two people (1.0%), and Bachelor totaling 28 people (13.5%).

Table 6: Statistics

Combined knowledge		
N	Valid	207
	Missing	0
Mean		127.17
Median		127.00
Std. Deviation		10.025

In table 6 statistics, there is a median value for the overall questionnaire questions with a value of 127.00. This value is used to divide between good and bad knowledge. So a score less than 127 is bad knowledge, and a score of 127 and more than 127 is good knowledge.

Table 7: Combined Knowledge

		Frequency	%	Valid %	Cumulative %
Valid	Poor	98	47.3	47.3	47.3
	Good	109	52.7	52.7	100.0
	Total	207	100.0	100.0	

Then in table 7 of combined knowledge, the results of the respondents who have poor knowledge are 98 people (47.3%), and good knowledge is 109 people (52.7%).

Table 8: Statistical BSE Knowledge Knowledge

BSE Knowledge		
N	Valid	207
	Missing	0
Mean		52.61
Median		53.00
Std. Deviation		4.855

In table 8 statistics, there is a median value for knowledge about the questionnaire, which contains BSE with a value of 53.00. The value is used to divide between good and bad knowledge as follows; a value of fewer than 53.00 respondents with poor knowledge, a value of 53.00 or more is a respondent with good knowledge.

Table 9: BSE Knowledge

		Frequency	%	Valid %	Cumulative %
Valid	Poor	100	48.3	48.3	48.3
	Good	107	51.7	51.7	100.0
	Total	207	100.0	100.0	

After finding the median, respondents with good and bad knowledge will appear. Namely, respondents with poor knowledge were 100 people (48.3%), and respondents with good knowledge were 107 people (51.7%).

Table 10: Breast Cancer Knowledge Statistics

	Pengetahuan Kanker Payudara	
N	Valid	207
	Missing	0
Mean		74.55
Median		75.00
Std. Deviation		6.496

In table 10 statistics, there is a median value for the questionnaire questions containing knowledge of breast cancer with a value of 75.00. This value is used to share the respondents' knowledge as follows; scores below 75.00 respondents with poor knowledge, scores 75.00 and more respondents with good knowledge.

Table 11: Knowledge of Breast Cancer

		Frequency	%	Valid %	Cumulative Percent
Valid	Buruk	100	48.3	48.3	48.3
	Baik	107	51.7	51.7	100.0
	Total	207	100.0	100.0	

Then in table 11, knowledge of breast cancer, the results show that respondents with poor knowledge are 100 people (48.3%) and respondents with good knowledge are 107 people (51.7%).

Table 12: BSE Behavior

		Frequency	%	Valid %	Cumulative %
	Do not do	112	54.1	54.1	54.1
Valid	Do	95	45.9	45.9	100.0
	Total	207	100.0	100.0	

Then in table 12 BSE behavior, the results show that respondents who do BSE are 95 people (45.9%) and respondents who do not do BSE are 112 people (54.1%).

b. Bivariate Analysis

Table 13: Crosstabs

Do you do BSE or not? * Crosstabulation BSE knowledge

		BSE knowledge		Total
		Poor	Good	
Do you do BSE or not?	Do not do	97	15	112
	Do	3	92	95
Total		100	107	207

Table 13 is a bivariate analysis. Analyzing two variables, namely independent and dependent variables. The independent variable is the respondent's BSE, and the dependent variable is BSE knowledge. In the table, it can be seen that there are 97 people with a bad knowledge of not doing, and 92 people with good knowledge of doing.

Table 14: Chi-Square Tests

	Value	Df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	143.342[a]	1	.000		
Continuity Correction[s]	140.020	1	.000		
Likelihood Ratio	171.882	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	142.649	1	.000		
N of Valid Cases	207				

In table 14, it is explained that the two variables have a significant line. That is, between variables 1 and 2 correspond to a value of 0.000.

Table 15: Symmetric Measures

		Value	Asymptotic Error	Standardized	Approximate T[b]	Approximate Significance
Interval by Interval	Pearson's R	.832	.037		21.485	.000[c]
Ordinal by Ordinal	Spearman Correlation	.832	.037		21.485	.000[c]
N of Valid Cases		207				

In table 15, the results show that the value is 0.832, where there is a very strong correlation of 0.832 between the respondents' knowledge of BSE and doing BSE.

Based on the results in the tables above, it is known that the researcher conducted a bivariate analysis of BSE knowledge with early detection examination (BSE). After statistical tests were carried out, the correlation coefficient was 0.832 with a significance level of 0.000. Proving that there is a relationship between the level of BSE knowledge and BSE behavior.

This result is directly proportional to Angesti Nugraheni's research which in her research after statistical tests using Spearman's rank obtained the correlation coefficient π = 0.404 with a significance level of 0.00 (P < 0.05), proving that there is a positive relationship between the level of knowledge about BSE and BSE behavior. From the results above, there is a tendency that the higher the level of knowledge about BSE, the better BSE behavior will be, and the lower the level of knowledge about BSE, the less good BSE behavior will be [24].

In another study by Nur Aini Retno Hastuti, this study used a different research method but had the same results, namely a quasi-experimental study: before and after with control design, also known as before and after intervention design. Based on the results of the statistical test calculation results in the Asymp.Sig value of 0.000 (<0.05), Ha is accepted, and Ho is rejected. Thus, it can be seen that there is a significant difference in scores between the post-test and the pretest results. So it can be concluded that there is an effect of BSE training on the ability to do BSE. The research showed that the post-test results were better than the pretest results in the experimental group. It was due to treatment, namely before the post-test, the students were given training.

The goal to be achieved in this training is to increase students' ability to do BSE. It follows the general objective of the training, which is to develop skills, knowledge, and attitudes. This research is also directly proportional to the research of the author 2. So this study provides knowledge about BSE first so that there is a relationship between BSE knowledge and BSE action.

Based on the research results above, it can be proven that the hypothesis is accepted, namely that there is a relationship between knowledge of women aged 25-50 years on BSE and early detection of breast cancer. It is following the theory review that BSE behavior, which is included in health behavior, is influenced by heredity and environmental factors

that start from thinking based on knowledge until it finally appears in behavior [25; 26].

The results of the research above are also following the theoretical review, which states that based on experience and research, behavior based on knowledge will be more lasting than behavior that is not based on knowledge [27]. But this research is not in line with the research by Sari Septiani and Mahyar Suara. The study showed that respondents with high knowledge about early detection of breast cancer BSE (86.7%) and only two people categorized as having low knowledge had negative BSE behavior. Based on the results of statistical tests obtained p = 1,000 > 0.05, it can be concluded that there is no significant relationship between knowledge and BSE behavior in students of SMAN 62 Jakarta in 2012.

In addition, there is another difference with Utami's research entitled The relationship between Knowledge about Breast Cancer and Breast Self-Examination Behavior (BSE) in Nursing Students (PSIK) A FK UGM in 2007. The results of the analysis in this study obtained the value of = 0.176 with a significance level of 0.064 (P > 0.05), indicates that there is no significant relationship between the level of knowledge about breast cancer and the behavior of breast self-examination (BSE) with a very weak correlation level. The difference in the analysis results can be caused by factors of research subjects with different educational backgrounds. The research subjects used by the previous researchers were PSIK at FK UGM students. In addition, the independent variable in this study is knowledge about breast cancer which is still too broad in scope, while the researcher uses a more specific independent variable, namely knowledge about BSE 20, 31.

CONCLUSION

From the results of the research on the relationship of knowledge in women aged 25-50 years in RW 05 Cibubur, East Jakarta to BSE as early detection of breast cancer, the following conclusions were obtained: a) Level of knowledge about BSE in women aged 25-50 years in RW 05 Cibubur, East Jakarta pretty good. It is proven from the results of the research the results of the respondents who have good knowledge are more; b) The level of knowledge about breast cancer in women aged 25-50 years in RW 05 Cibubur, East Jakarta is quite good. It is proven from the research results that the results of the respondents who have good knowledge

are more; c) The act of doing BSE on women aged 25-50 years in RW 05 Cibubur, East Jakarta has not been good. Because the most frequent are those who do not do BSE; and d) There is a positive and significant relationship between the level of knowledge about BSE and the act of doing BSE in women aged 25-50 years in RW 05 Cibubur, East Jakarta, with a very strong correlation level of 0.832. Thus, health workers can increase [13] attention to health education for women, especially about breast cancer and preventive and promotive measures, namely by using BSE to reduce the risk of breast cancer. It can be detected earlier using BSE to be detected earlier and can be treated more quickly—in addition, increasing preventive measures for early breast cancer by increasing knowledge about breast cancer and BSE and being able to do it in everyday life for the community. Then multiply to follow the counseling that is carried out at the puskesmas around the place of residence, increase knowledge about women's health through magazines and then open the internet (but with clear sources) and then watch television programs that display a lot of interactive conversations carried out by competent health doctors or staff.

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