

## The Seeking Treatment among Breast Cancer Patients

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Received: 25/06/2016; published: 26/09/2016

### Abstract

**Background:** Breast cancer is the second highest-rate incidence after cervical cancer. Moreover, the breast cancer epidemic is getting increasing over years. The aim of this research was to know the strength correlation between knowledge and delay in seeking treatment among breast cancer patients at General Hospital Center Dr. M. Djamil Padang. **Method:** This was a case control study. Respondents of the research were patients of breast cancer and had been registered at General Hospital Center Dr. M. Djamil Padang in July-December 2013. 122 of the total sample divided 61 cases and 61 controls were collected. **Results:** This research showed level of knowledge of controlled women had 1.86 times the odds of delay in seeking treatment of breast cancer. (OR=1.86, 95% CI 0.68 to 5.089). Therefore, having higher awareness in breast cancer is driven women to early detection and screening methods by conducting an intensive counseling. **Conclusion:** Women had lower knowledge of breast cancer treatment this analysis suggests that women need further information about the different types of breast cancer symptoms to assist symptom recognition.

**Keywords:** breast cancer; delay seeking treatment; patients

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### 1. Background

Breast cancer is a common and frequently fatal disease, and the most commonly diagnosed cancer in women. Breast cancer is an issue of public health concern in Indonesia. It ranks second after cervical cancer.<sup>(1)</sup> Disease patterns and causes of death today have undergone a change which is known as the epidemiological transition. If the cause of death was initially dominated by infectious disease or infection, this time the pattern shifted to non-infectious diseases or degenerative diseases.<sup>(2)</sup>

According to World Health Organization (WHO), cancer is the second leading cause of death worldwide after cardiovascular diseases. Various cancer control efforts have been made, especially in developed countries through prevention and early detection of risk factors for cervical cancer and breast cancer.<sup>(3)</sup> Breast cancer is the fifth most common form of cancer out of all cancers occurring in females, reaching 18% of all cancers occur in women. In 2002, breast cancer was the first leading of all cancers in women with new cases by 22.7% and the number of deaths per year 14% of all cancers in women.<sup>(4)</sup>

In Indonesia, statistical data is not identified yet for sure depicting breast cancer patients because there is no population-based cancer registry.<sup>(1)</sup> But the estimate of the International Agency for Research on Cancer (IARC) in 2005, cancer incidence in Indonesia is estimated to be around 26/100.000 population. WHO reported the estimated number of deaths from breast cancer in Indonesia was 9.9/100,000 population. That is mean every 100.000 people there will be 9 to 10 people died from breast cancer. WHO estimates that approximately 21.500 people of the total population of Indonesia died of breast cancer.

In 2009, the WHO reported a growing number of breast cancer each year and 5 million die from breast cancer. While the last survey in the world are reporting that every 3 minutes found a patient with breast cancer and every 11 minutes found a woman dies from breast

cancer. The impact caused by breast cancer is decreased life expectancy due to the small number of healing that lead to death, length of suffering and expensive treatment. WHO described the four principal approaches of cancer control to cancer prevention, early detection, diagnosis/treatment and palliation. Delay in breast cancer is defined as patient delay between first detection of symptom and first medical consultation.<sup>(5)</sup>

In developed countries the death rate from breast cancer has decreased by 40%. This is because breast cancer has to be found as early as possible, so that treatment can be done quickly.<sup>(6)</sup> Over the last five years has made efforts to counseling and prevention of breast cancer by both the government and the public such as in hospitals and in the Indonesian cancer foundation. In Indonesia, many people to early detection of breast cancer a breast self examination (BSE), Clinical Breast Examination (CBE) and mammography examination. Program of early detection and follow-up of early breast cancer has been proclaimed as a national program and in 2011 has been developed by the Ministry of Health in 310 health centers in 84 districts/municipalities in 17 provinces, one of West Sumatra. The purpose of this study was to determine the correlation between the lack of knowledge and delay of seeking treatment of breast cancer patients at the Hospital Dr. M. Djamil Padang.

## 2. Method

The population of the study are all women who were registered in Dr. M. Djamil Padang Hospital. The minimum sample size calculated was 43 by using two sample proportion formula of Lemeshow et al (1997). Total patients were diagnosed with breast cancer in stage IIIA-IV was 71 patients, but according to medical records that showed the control group who came for treatment was 64 patients, and 3 patients had <20 years old. It is mean control group less than was the case group. We decided to take the whole control group as many as 61 patients. This study uses the comparison of cases and controls by 1:1, then the large case group was 61 and a control group was 61 patients. The samples were selected purposively from a medical record.

## 3. Results and Discussion

The result of data analysis Table 1 on knowledge to delay in seeking treatment shows that the patient who have poor knowledge on breast feeding early detection would be late to find the treatment (OR=2.72, 95% CI; 1.273 to 5.819 ).

**Table 1.** The correlation of knowledge and delay in seeking treatment

Knowledge	Seeking Treatment				OR (95% CI)	p-value
	Delay		No			
	n	%	N	%		
Poor	45	73.8	31	50.8	2.72	0.009
Good	16	26.2	30	49.2	(1.273-5.819)	
Total	61	100.0	61	100.0		

As shown in Table 2, factors significantly related to delayed seeking treatment were perceptions of the cost (OR=3.169, 95% CI: 1.469 to 6.838, p=0.03), perceptions of family support (OR=2.564), 95% CI: 1.155 to 5.692, p=0.019), and traditional healer (OR=3.387), 95% CI=1.609 to 7.129, p=0.001). However, there is no significant correlation between the level of education, attitude, perceptions of access to early detection services, perceptions of health workers to support delay seeking treatment.

**Table 2.** Bivariate analysis, covariat variables (level of education, attitude, perception of cost, access, perceptions of health workers support, perception of family support, traditional healer)

Variable	Seeking Treatment				OR crude (95% CI)	p-value
	Delay		No			
	n=61	%	n=61	%		
<b>Education</b>						
Low	19	31.1	16	26.2	1.272 (0.579-2.795)	0.48
High	42	68.9	45	73.8		
<b>Attitude</b>						
Poor	30	49.2	25	41.0	1.394 (0.681-2.851)	0.363
Good	31	50.8	36	59.0		
<b>Peception of Cost</b>						
Expensive	46	75.4	30	49.2	3.169 (1.,469-6.838)	0.03
Cheap	15	24.6	31	50.8		
<b>Access to health facilities</b>						
Difficult	24	39.3	16	26.2	1.824 (0.847-3.931)	0.123
Easy	37	60.7	45	73.8		
<b>Perception of health workers support</b>						
No	30	49.2	39	63.9	1.832 (0.888-3.781)	0.1
Yes	31	50.8	22	36.1		
<b>Perception of family support</b>						
No	47	77.0	36	59.0	2.564 (1.155-5.692)	0.019
Yes	14	23.0	25	41.0		
<b>Traditional healer</b>						
Yes	41	67.2	23	37.7	3.387 (1.609-7.129)	0.001
No	20	32.8	38	62.3		

The confounding variables that should remain in the multivariate model is the level of education, attitude, perception of costs, perceptions of family support, perception of health workers support, traditional healer.

**Table 3.** Result for Stratification Analysis

Variables	Keterangan	
	Confounding	Modification Effect
Educatations	-	-
Attitude	+	-
Cost	+	-
Perception of health worker	+	-
Perception of Family Support	+	-
Perception of	-	-
Traditional healer	+	-

**Table 4.** Result for Confounding

Variabel	B	p	OR	Δ OR	95% CI
First model	0.868	0.009	2.72	OR Gold	1.273-5.819
First model+Tarditional healer(model 1)	1.122	0.004	2.381	12.53	1.435-6.571
Model 1+family support (model 2)	0.758	0.65	2.134	21.60	0.954-4.776
Model 2 + cost (model 3)	0.584	0.172	1.793	34.13	0.776-4.145
Model 3+ health workers (model 4)	0.453	0.314	1.573	42.21	0.651-3.802
Model 4 + acces to health facilities (model 5)	0.351	0.446	1.420	47	0.576-3.503
Model 5 + Attitude (model 6)	0.613	0.233	1.845	32.22	0.675-5.048
Model 6 + level of education	0.620	0.227	1.860	31.67	0.680-5.089

The final results of multivariate analysis can be seen in Table 5 that was obtained p-value in the variable knowledge of  $>0.05$ , which indicates that there is no correlation between knowledge with delay in seeking treatment among patients at Dr. M. Djamil Padang Hospital. OR=1.86 (95 % CI=0.68 to 5.089).

**Table 5.** Result for multivariate analysis on correlation knowledge to delay in seeking treatment among breast cancer patients

Variabel	B	P	OR	95% CI
Knowledge	0.62	0.227	1.86	0.68-5.089
Traditional healer	1.011	0.743	2.75	1.219-6.202
Family support	0.870	0.053	2.389	0.99-5.752
Cost	0.89	0.086	2.201	0.895-5.415
Health workers support	0.643	0.162	1.901	0.772-4.682
Acces to health facilities	0.675	0.143	1.964	0.797-4.844
Attitude	-0.566	0.26	0.568	0.212-1.520
Level of education	-0.163	0.743	0.849	0.32-2.255

Care-seeking behavior is a part of the health behaviors that an individual's response to cure the diseases. But many various responses of the people do on the illness, such as no action on the illness, cure by themselves, seeking treatment to the traditional healer, and go to public or private health facilities (clinics, health centers, hospitals, and physician practices).<sup>(7)</sup>

Among the study participant, 93.4% (case groups) and 83.6% (control groups) said that they felt any symptoms before visit to the health service. People who do not have any symptoms of breast cancer would do nothing, but if they feel the pain so they will find treatment. Based on this research, there are many efforts of the personal when they feel any symptoms of breast cancer.

Firstly, do not act. This study found that 37.7% respondents in case group do not aware when they have any symptoms and 18.0% respondents in control group would do the same. This situation happened because of some reasons, such as: The symptom does not disturb their work or daily life, doing work more valuable than go to the health service (time consuming), distance, fear to visit a doctor, and cost of health care.<sup>(7)</sup> It shows that health is not a priority in their life.

Secondly, 14.8% respondents in case group try to cure the illness by buy the drugs in the store and the respondents in control group was do not.

Thirdly, There are 67.2% of the respondents in the case group and 62.3% respondents in the control group seeking treatment to the traditional healer. The study that was done by Tanzania was reported that 37% of the study participants delayed of seeking treatment in the health facilities because they were getting treatment from traditional healer. These findings implies that patients spend more time seeking treatment at the traditional healers and they came to the hospital when cancer is at high level and difficult to cure.

The results showed that 37.7% respondents in case group and 32.8% respondents in the control group chosen the first treatment to the hospital after they know the symptoms and the treatment is chosen first by the respondent after knowing the symptoms is the case group (37.7%) of respondents seek treatment and control to the hospital (32.8%). But in the case group (32.8%) of respondents are seeking alternative treatments more than the group not too late (8.2%). several breast cancer patients who did not make his illness, because he felt no pain and lack of knowledge and misinformation about the disease can harm as well as life threatening. Breast cancer patients are not promptly treated, and do not get proper treatment can make the disease more severe and lead to death. If breast cancer is caught early, the chances for a full recovery in 70% of patients.<sup>(8)</sup>

Lack of breast cancer knowledge is one of important delaying factor in seeking treatment. In this study (73.8%) case group and (50.8%) control group had poor knowledge about early detection of breast cancer. Statistical analysis showed that there is a correlation between knowledge and delay in seeking treatment among breast cancer patient, ( $p=0.009$ ,  $OR=2.72$ ,  $95\% CI=1.273$  to  $5.819$ ). Indicating that respondent with low level knowledge of breast cancer has 2.72 times risk to late to seek treatment than respondent with high level of breast cancer knowledge. Hanna et al (2010) mentioned that low awareness on knowledge risk factors; symptoms or signs of breast cancer contribute to delay for early diagnosis and treatment. Only 20% had good knowledge about breast cancer [10]. Salaudeen (2009), the majority (63,3%) of respondents had a good knowledge about breast cancer.<sup>(9)</sup>

Multivariate analysis showed, knowledge was not significantly correlated with delay in seeking treatment among breast cancer patients ( $p>0$ ,  $227$ ;  $OR=1.86$  ( $95\% CI=0.68$  to  $5.089$ )) after controlled by level of education, attitude, costs, family support, health workers

support, access to of health service and traditional healer. A study done for women in Rombo by Kazaura, et al (2007), reported that there are no correlation between patient knowledge and delay in seeking treatment.<sup>(10)</sup> This is explained due to insufficient sample size and homogeneous study population. Also their knowledge towards breast cancer was low. The results of this study different from research conducted by Irma (2010) in his research on Soetomo Hospital Surabaya, there is a significant correlation between knowledge and patient delay in seeking treatment of breast cancer (OR=4.567). The different results may be due to the level of knowledge in the case and control group equally low.<sup>(11)</sup> Respondents knew about touched the breast to look for lumps in BSE, respondents got BSE information from health care workers.<sup>(12)</sup> In previously study reported that delays in patients seeking treatment found that there were respondents were not aware of breast cancer and early examination of breast cancer.<sup>(13)</sup>

Knowledge is the result out on the object through the sense that it has a dominant factor in construct behavior. Knowledge is also one factor to facilitate the emergence of a person's behavior. In behavior-change strategy, WHO recommends to change behavior through education/knowledge begins with providing information/knowledge about health, so it is expected to increase public knowledge. With increasing knowledge, it will give rise to consciousness, which in the end they will behave in accordance with their knowledge.

The level of education is a confounder variables in the multivariate analysis OR=0.849 (95% CI=0.32 to 2.255). Attitude is a confounder variable with OR=0.586 (95% CI=0.212 to 1.520). Cost is also a confounder with OR=2.201 (95% CI=0.895 to 5.415). Perception access to early detection services is a confounder with OR=1.964 (95% CI=0.797 to 4.844). Perception access to early detection services is a confounder with OR=1.901 (95% CI=0.772 to 4.682). Perception of family support is a confounder with OR=2.389 (95% CI=0.99 to 5.752). Traditional healer is a confounder with OR=2.75 (95% CI=1.219 to 6.202).

#### 4. Conclusion

Women had lower knowledge of breast cancer treatment this analysis suggests that women need further information about the different types of breast cancer symptoms to assist symptom recognition. In addition, women may benefit from greater awareness of the benefits of early detection.

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