RELATION OF KNOWLEDGE ABOUT BREAST CANCER WITH BREAST SELF EXAMINATION (BSE) BEHAVIOR IMPLEMENTATION ON CHILDBEARING AGE WOMEN IN BANDUNG

Chris Sriyanti[1]
[1]Midwivery Department at Bandung Ministry of Health., Jl. Sederhana No.2 Bandung, 40161, Indonesia

INFORMASI ARTIKEL:

A B S T R A C T

Breast cancer is a serious threat for women all over the world including Indonesia. Self Breast-Examination (BSE) is one of important early detection efforts in reducing morbidity and mortality due to breast cancer. The implementation of BSE as a behavior is influenced by many factors, including knowledge. This study aims was to analyze the relation of knowledge about breast cancer with the behavior of BSE implementation on childbearing age women at Bandung, West Java.

Cross-sectional design was used with 420 respondents. Women over the age of 20 were randomly selected to participate in this study. Questionnaire was used as data collection instrument. Data was analyzed by using Chi-Square with statistical significance level at $p < 0.05$. The results showed that 56.2% of respondents had good knowledge about breast cancer and 43.8% were still at low level, while the implementation of BSE was also still low at 39% (IK 95%: 34, 5% -43.8%). There was significant relation between knowledge about breast cancer and the behavior of BSE implementation on childbearing age women in Bandung ($p < 0.001$).
.

BACKGROUND

Breast cancer is a serious threat for women all over the world including Indonesia. Data from cancer country profile (2014) released by World Health Organization (WHO) mention that breast cancer is the most common cancer in Indonesian women (48.998). It contributes as much as 21.4% in death caused by cancer, followed by cervical cancer as much as 20,928 with mortality rate of 10.3%.

Death caused by breast cancer in Indonesia and other developing and poor countries are happen because many of those cases were detected in advanced stage. It's caused there's some kind of delay in early detection and the patient check it to health worker after three months or more after they feel the symptoms. (Khakbazan Z, Taghipour A, Roudsari RL, Mohammadi E, 2014). The incidence of breast cancer at young ages (under 40 years) is more common in developing and poor countries compared to Western countries. (Abolfotouh MA, Ala'a AB, Mahfouz AA, Al-Assiri MH, Al-Juhani AF, Alaskar AS, 2015).

Early detection has important role in reducing morbidity and mortality from breast cancer. Early detection of breast cancer with BSE for developing countries such as Indonesia is still one of recommended method and it still effective enough to find lumps or breast cancer in early stage (Khan TM, Leong J, Ming LC, Khan AH, 2015). Breast cancer that found in early stage and get adequate treatment immediately, can improve the recovery and life expectancy of breast cancer patients (Avci IA, Kumcagiz H, Altinel B, Caloglu A, 2014).

Several studies have shown that most breast tumors or cancers were first discovered by women themselves. This can happen if the woman cares and aware of the changes that occur in her breasts. Changes or the presence of a lump in the breast can be detected early by doing BSE, wich only need short times, simple method and also doesnot need any costs because it can done by ourself. If a lump is found on the breast, the woman can immediately contact or check health workers to conduct a clinical breast examination (CBE) or other supporting tests such as ultrasound or mammography (Alwan NA, Al-Diwan JK, Wafa'M A-A, Eliessa RA, 2012 dan Sharma PK, Ganguly E, Nagda D, Kamaraju T, Ghanpur R, Pradesh A, et al., 2013).

BSE as a behavior is also influenced by many factors, including knowledge. Several studies that had analyzed relation of knowledge and BSE behavior implementation have been carried out in several countries and also several cities in Indonesia. West Java is one of three provinces in Indonesia which is estimated has the highest number of breast cancer cases in addition to Central Java and East Java in 2013. Estimation of the number of breast cancer patients in West Java In 2013 was 6,701 (Kementerian Kesehatan, 2015). Meanwhile, the evaluation of BSE implementation on childbearing age women in Bandung has not been reported. This study was to analyze the relation of knowledge about breast cancer with the BSE behavior implementation on childbearing age women in Bandung.

METHOD

This was a cross-sectional research with knowledge about breast cancer as independent variable and BSE behavior implementation as dependent variable.

Population was all childbearing age women in Bandung, and those who fulfill inclusion criteria became respondents. The minimum number of samples needed in anticipation of missing data is 420 persons. Inclusion criteria was childbearing age women, age more than 20 years, live in Bandung, capable in writing and reading Indonesian language. While exclusion criteria was pregnant or breastfeeding mother, health worker,

having breast cancer treatment and not in Bandung at research time.

Multistage random sampling was used at Cipedes village of Sukajadi district of Bandung. 420 childbearing age women were randomly selected for this research. Questionnaire that developed by Mustofa Abolfatouh et al was used to collect data, and it has two alternative answers: "yes" and "no" in 30 questions contain statements about breast cancer early detection (4 numbers), breast cancer (6 numbers), signs that need to be watched as symptoms of breast cancer (7 numbers), and breast cancer risk factors (13 numbers). (Abolfotouh MA, Ala'a AB, Mahfouz AA, Al-Assiri MH, Al-Juhani AF, Alaskar AS, 2015). Questionnaire trials was done to 30 childbearing age women at Sukabungah village of Sukajadi district of Bandung who had same characteristics with the respondents. As much as 27 questons about knowledge was valid and reliable (RASCH model). Data collection was done at August-September 2017.

Data was analyzed by using *Statistical Package for Social Science* (SPSS). Frequency distribution was used to analyzed univariabel data and percentage for categorical variables in distribution frequency table. Chi-square was used for bivariabel data and it significant if p<0.05

RESULTS

Table 1. Knowledge description about breast cancer and BSE implementation (n=420)

Knowledge about breast cancer	n	%
Good	236	56,2
Deficient	184	43,8
BSE implementation		
Yes	164	39,0
No	256	61,0
BSE frequency		
Reguler (once a month)	37	8,8
Irregular	127	30,2
Has never been	256	61,0
Already have information about BSE		
Yes	290	69
No	130	31
Information source		
Mass media	168	40
Health worker	92	21,9
Friends	50	11,9
Family	21	5
Internet	42	10

According table 1, more than half respondents (56,2%) were having good knowledge about breast cancer and 43,8% of respondents were not in good level of knowledge.

BSE implementation were still low (39%) and as much as 61% have not implemented BSE. Viewed from the frequency of BSE implementation on all respondents, only 8,8% who have carried out BSE regularly once a month in the last 6 months.

More than half of respondents (69%) had received information about BSE and the largest source of information came from mass media (40%).

Table 2. Relation of knowledge about breast cancer with BSE behavior implementation (n=420)

Knowledge about breast cancer	BSE		p-value*
	Yes	No	
Good	110	126	**<0,001**
Deficient	54	130	

*) Uji Chi square

Table 2 shows significant relation of knowledge about breast cancer with BSE behavior implementation (p<0,001).

DISCUSSION

This study shows BSE implementation on childbearing age women in Bandung were stil low (39%). If it seen from the BSE frequency based on

the American Cancer Society (ACS) recommendations, the respondents who carried out BSE every once a month were only 22.6%, while 77.4% of respondents did not doing it regularly. In other words, the comparison between those who doing it regularly and not was 1:11. Even so, there's about 69% of respondents claimed that they have had information about BSE. Information about BSE obtained by respondents is quite varied, such as from the mass media, health workers, friends, family, or from the internet. Mass media plays an important role in providing information because 40% of information was obtained by it.

If we compared it with BSE behavior that carried out by women who has risk of breast cancer in Semarang, which amounted to 52.3% (Desanti OI, IM Sunarsih S. 2012), as well as those that carried out by childbearing age women in Saudi Arabia, which is about 41.6% (Abolfotouh MA, Ala'a AB, Mahfouz AA, Al-Assiri MH, Al-Juhani AF, Alaskar AS, 2015), then the percentage of BSE implementation behavior on childbearing age women in Bandung were still lower. Meanwhile, this precentage were higher when it compared to childbearing age women in Aden-Yemen which is only as big as 11% (AI-Sakkaf K, Basaleem HO; 2016). The low behavior of BSE implementation on childbearing age women in Bandung is largely due to ignorance of how to do BSE correctly and properly. Other inhibiting factors include having difficulty detecting breast changes, fear of finding a lump in the breast, doesn't have time to doing it and other reasons.

The results also prove that knowledge of breast cancer had significant relation with BSE behavior implementation. It was supported by other studies such as Frietas's (2015) research in Brazil, Ardahan (2015) in Yemen, and Tilaki and Auladi (2015) in Iran. Childbearing age women in Bandung who had good knowledge of breast cancer, wheter it was about breast cancer risk factors, early detection of breast cancer, and about breast cancer itself, had 1.5 times opportunity to

carry out BSE behavior compared to those with less knowledge.

Knowledge becomes the basis for someone to behave, especially towards to early detection activities. Insufficient knowledge can cause a person to behave wrongly because it can cause confusion so it causes a lack of concern about BSE implementation as one of breast cancer early detection. Knowledge also underlies someone's perception or belief, so it will relates to their behavior. The low level of knowledge about breast cancer is one of determinant of late diagnosis and low community participation in early breast cancer detection programs. Health education programs need to be developed in order to increasing knowledge about breast cancer so that public awareness of BSE as a method of early detection of breast cancer can increase. (Freitas ÂGQ, Weller M; 2016 and Hajian TK, Auladi S; 2015).

Since the program of cancer prevention and early detection on Indonesian women was launched in 2007 and the establishment of the National Cancer Control Committee (KNPK) 6 years ago, childbearing age women awareness enhancement in breast cancer are still unsatisfactory. For this reason, further efforts or research are needed to find out the psycho-social factors that inhibit childbearing age women to carry out breast cancer early detection. By knowing this, the approach can be more appropriate so that participation in breast cancer early detection is expected can be increase. The participation of all parties, such as health workers, relatives, mass media, both print and electronic, is also important to disseminate information to prevent misconceptions about breast cancer.

CONCLUSION

The behavior of BSE implementation in childbearing age women in Bandung were still low. Knowledge had significant relation with BSE implementation behavior on childbearing age

women in Bandung. For this reason, there is a need for health education programs or health promotion both with counseling and training to further disseminate breast cancer early detection, especially with BSE, to the community which is supported by adequate funding and resources. Thus childbearing age women knowledge is expected to be better and the participation of childbearing age women in doing BSE can increase so that it can assess changes that occur in the breasts and can detect breast cancer in the early stage.

BIBLIOGRAPHY

Abolfotouh MA, Ala'a AB, Mahfouz AA, Al-Assiri MH, Al-Juhani AF, Alaskar AS, 2015. Using the health belief model to predict breast self examination among Saudi women. BMC public health. 15(1):1163.

Avci IA, Kumcagiz H, Altinel B, Caloglu A, 2014. Turkish female academician self-esteem and health beliefs for breast cancer screening. Asian Pac J Cancer Prev. 15(1):155-60.

Alwan NA, Al-Diwan JK, Wafa'M A-A, Eliessa RA, 2012. Knowledge, attitude & practice towards breast cancer & breast self examination in Kirkuk University, Iraq. Asian Pacific Journal of Reproduction. 1(4):308-11.

Ardahan M, Dinc H, Yaman A, Aykir E, Aslan B; 2015. Health Beliefs of Nursing Faculty Students about Breast Cancer and Self Breast Examination. Asian Pacific Journal of Cancer Prevention; 16(17):7731-6.

Abolfotouh MA, Ala'a AB, Mahfouz AA, Al-Assiri MH, Al-Juhani AF, Alaskar AS, 2015. Using the health belief model to predict breast self examination among Saudi women. BMC public health. 15(1):1163.

AI-Sakkaf K, Basaleem HO; 2016. Breast cancer knowledge, perception and breast self-examination practices among Yemeni Women: an application of the health belief model. Asian Pac J Cancer Prev.; 17(3):1463-7.

Desanti OI, IM Sunarsih S. 2012. Persepsi Wanita Berisiko Kanker Payudara tentang Pemeriksaan Payudara Sendiri di Kota Semarang, Jawa Tengah. Berita Kedokteran Masyarakat (BKM). 26(3):152.

Freitas ÂGQ, Weller M; 2016. Knowledge about Risk Factors for Breast Cancer and Having a Close Relative with Cancer Affect the Frequency of Breast Self-Examination Performance. Asian Pacific Journal of Cancer Prevention. 17(4):2075-81.

Hajian TK, Auladi S; 2015. Awareness, Attitude, and Practice of Breast Cancer Screening Women, and the Associated Socio-Demographic Characteristics, in Northern Iran. Iranian journal of cancer prevention; 8(4):e3429.

Khakbazan Z, Taghipour A, Roudsari RL, Mohammadi E., 2014. Help seeking behavior of women with self-discovered breast cancer symptoms: a meta-ethnographic synthesis of patient delay. PLoS One.9(12):e110262.

Kementerian Kesehatan, 2015. Buletin Jendela Data dan Informasi Kesehatan.

Khan TM, Leong J, Ming LC, Khan AH, 2015. Association of knowledge and cultural perceptions of Malaysian women with delay in diagnosis and treatment of breast cancer: A systematic review. Asian Pac J Cancer Prev. 16(13):5349-57.

Sharma PK, Ganguly E, Nagda D, Kamaraju T, Ghanpur R, Pradesh A, et al, 2013. Knowledge, attitude and preventive practices of South Indian women towards breast cancer. Health. 1(1):16-22.

http://www.who.int/cancer/country-profiles/en/. [cited 10 Maret 2017