

## **Knowledge of Teenage Girls on Breast Self-Examination Behavior (BSE)**

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### **ABSTRACT**

Breast Self-Examination (BSE) is an early detection of breast cancer that can be done by teenage girl since early stage. Early detection of breast cancer can reduce mortality by 25-30%. The results of a preliminary study of 6 teenage girls there are 4 young women who have never practiced BSE routinely after menstruation. This type of research is a quantitative survey, with a cross sectional approach. The population in this study were all Teenage Girls Class X SMK Negeri 2 Karawang. Sampling was carried out in total population with a sample of 150 respondents. Data was collected by distributing questionnaires using google form. The data analysis technique used was univariate and bivariate with chi square test. Univariate analysis showed that of the 150 respondents studied there were 96 respondents (64%) who had low knowledge, and 126 people (84%) of class X teenage girls had never done BSE. Chi square statistical test showed a significant relationship between knowledge about breast self-examination (BSE) and BSE behavior with a p value of 0.02. It was concluded that there was a need for counseling from health workers about reproductive health for teenage girl, especially about the practice of breast self-examination (BSE), as an early detection of breast cancer.

**Keywords:** Knowledge, Behavior, BSE

### **1. INTRODUCTION**

One of the health problems that occur throughout the world is cancer. Breast cancer is the main cause of death experienced by women in Indonesia. The mortality rate from breast cancer continues to increase because it is detected at an advanced stage. More than 185,000 women are diagnosed with breast cancer each year. The incidence of this disease is increasing in developed countries. (Ministry of Health RI, 2016).

Global Cancer Observatory data from the World Health Organization (WHO) shows that the highest cancer case in Indonesia is breast cancer, which is 58,256 cases or 16.7% of the total 348,809 cases. It is predicted that in 2019, nearly 9 million people died worldwide. due to cancer and will increase to reach 13 million people per year in 2030. (Rivanica & Dayanti, 2020). The Ministry of Health states that 42.1 people/100 thousand Indonesians suffer from breast cancer. With an average death rate of 17 people/100 thousand population. While the incidence of cervical cancer reached 23.4 people/100 thousand population of Indonesia. With an average death rate of 13.9 people / 100,000 population due to cervical cancer (Ministry of Health RI, 2019). The results of Riskesdas 2013, show that the incidence of breast cancer is 0.5 , and cervical cancer is 0.8 . (Ministry of Health RI, 2015).

In 2013 in West Java Province there were 0.3 ‰ incidence of breast cancer and 0.7 ‰ incidence of cervical cancer (Jabar Province Health Office, 2017). The results of the recapitulation of early detection of breast cancer at the Karawang Regency Health Office for the last 5 years suspected of having breast cancer as many as 71 cases (Karawang Regency Health Office, 2019). The risk of breast cancer continues to increase by getting older the age, the youngest age for breast cancer is 10-14 years, and

the increase in breast cancer prevalence occurs in the age group less than 45 years, and the incubation period for breast cancer can be estimated as long. 8 – 12 years. (Anggraini, 2017).

BSE is a simple method that can be done for early detection of breast cancer, BSE is easy to do, inexpensive, painless, harmless and convenient to do. But only about two thirds of women want to practice it once a year, and one third want to practice it every month, and about half can do it right. This is due to the lack of information and knowledge of young women about BSE. (Wardhani et al., 2017). Breast self-examination can be started when a woman experiences puberty. This is very necessary to find out as early as possible abnormalities and abnormal lumps in the breast. so that the handling is faster and more precise. (Setyawan et al., 2019).

BSE is more effective for women who are young and productive age 15-49 years. Women of this age are at risk of developing tumors or breast cancer. However, until now, women's awareness of the practice of BSE is still very low, which is only around 25%-30%. The low awareness of women is due to the lack of education and knowledge of women about the importance of practicing BSE. (Sari et al., 2020). Based on the results of interviews of teenage girls conducted on Class X SMK Negeri 2 Karawang, they stated that they had not received health education or counseling about BSE. Interviews conducted by researchers on 6 young women showed that the youth's low motivation to do BSE. there are 2 out of 6 young women say they have never done BSE at all, while 2 young women, have done it but occasionally. This condition illustrates the lack of knowledge of young women about the importance of BSE, so there is no motivation to do it.

## 2. MATERIAL AND METHODS

This research is a quantitative survey with a cross sectional approach. The independent variable studied was knowledge, while the dependent variable was BSE Behavior. The subject of this study was a class X adolescent girl at SMK Negeri Karawang. The population in this study were all teenage girls in class X SMK Negeri 2 Karawang, which amounted to 150 people. The sampling technique in this research is total sampling with a total of 150 people. This primary data was collected using a measuring instrument in the form of a questionnaire given to respondents who became the research sample. The data analysis was univariate and bivariate using chi square..

## 3. RESULTS AND DISCUSSION

Based on the results of research and analysis carried out, the following results were obtained :

**Table 1. BSE Knowledge**

Knowledge	Frequency	%
Low	96	64
High	54	36
Total	150	100

**Table 2. BSE Behavior**

BSE behavior	Frequency	%
No	126	84
Yes	24	16
Total	150	100

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**Table 3. Bivariate Analysis**

Knowledge	No		Yes		Total		p- value	OR (95% CI)
	n	%	n	%	N	%		
Low	86	68	10	42	96	100	0.02 (1.188-5.216)	2.49
High	40	32	14	58	54	100		
<b>TOTAL</b>	126	100	24	100	150	100		

From the analysis of the relationship between knowledge and BSE behavior, it was found that there were 40 respondents with high knowledge but never doing BSE. While 86 respondents with low knowledge who have never done BSE. From the results of the chi square statistic test, the p value = 0.02, because the p value <0.05, it can be concluded that there is a significant relationship between knowledge and breast self-examination behavior (BSE). From the results of the analysis, it is known that the OR = 2.49 (95% CI: 1.118 - 5.216), meaning that girls who have high knowledge have a chance of 2.4 times to do breast self-examination compared to girls who have low knowledge.

Based on the results of the study, it showed that more than half (68%) of respondents who had low knowledge about conscious, and the results of the chi square statistical test obtained p value = 0.02, because the p value <0.05, it can be concluded that there is a significant relationship between knowledge and breast self-examination behavior with OR = 2.49 (95% CI: 1.118-5.216). This is in line with the results of the research by Dewi Elliana et al, showing that the results of the chi square test statistic obtained a p value of 0.01, it can be concluded that there is a relationship between the level of knowledge of BSE youth youth and BSE behavior (Elliana et al., 2020).

Based on the results of the study, more than half (84%) of class X teenage girls at SMK Negeri 2 Karawang in 2020 didn't do BSE. According to (Notoatmodjo, 2014), healthy behavior is behavior related to efforts to prevent or avoid and prevent disease (preventive), Meanwhile, according to Sunaryo, behavior is an activity that arises because of the stimulus and response and can be observed directly or indirectly. According to Novita Nining Anggraini's research, it shows that the majority of respondents have good BSE behavior (51.0%), compared to respondents who have poor BSE behavior (49.0%). (Anggraini, 2017).

#### 4. CONCLUSION

Based on the results of the research conducted, it can be concluded that more than half (64%) of the Teenage Girls studied have low knowledge of BSE behavior, and most of the respondents studied (84 %), who have never done BSE. And there is a significant relationship between the knowledge of young women about BSE and the behavior of breast self-examination (BSE) in Teenage Girls at SMK Negeri 2 Karawang in 2020. Teenage girls are expected to increase their knowledge about breast cancer and the importance of practicing breast self-examination (BSE) as early as possible as an effort to detect breast cancer early. Health workers are expected to be able to provide information and education about breast self-examination and to increase the knowledge and awareness of young women about the importance of breast self-examination (BSE) which is routinely carried out once a month, on the 7-10th day of menstruation. For further researchers, it is expected to be able to examine other variables related to BSE behavior and use other statistical tests

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