Correlation Between Female Junior High School Students Knowledge And BSE Behaviour

Winda Ayu Juwita Karni[1], Dewi Rostianingsih[2], Lenny Irmawaty Sirait[3]
[1,2,3] STIKes Medistra Indonesia, Bekasi, Indonesia

Abstract

Introduction: Breast cancer often presents as a painless lump and can develop, invade surrounding breast tissue, and spread to nearby lymph nodes or other organs in the body. The high mortality rate of breast cancer is due to a lack of knowledge about the disease and the importance of early detection, leading to many patients seeking medical help at a late stage. According to Globocan data from 2020, teenage cancer patients in Indonesia rank 3rd in Asia. The government recommends Breast Self-Examination (BSE) as the most effective screening method. BSE is very easy to perform, yet many teenagers are unaware of this method.
Objective: The review is to summarize the correlation between students knowledge and BSE Behaviour.
Method: The study used a descriptive quantitative design with a cross-sectional approach and a simple random sampling technique. The sample size was 141 students, and the chi-square statistical test was used for analysis.
Result: The majority, 91.5%, of Ananda Junior High School students had never performed BSE and had poor knowledge about the pathophysiology of breast cancer (93.6%) and breast cancer prevention (83.7%). A p-value of 0.000 (p < 0.05) was obtained, indicating a significant correlation between knowledge about the pathophysiology and prevention of breast cancer and BSE behavior.
Conclussion: The proportion of Ananda Bekasi Junior High School students who engage in BSE behavior is very low (8.5%). Most respondents had poor knowledge about the pathophysiology of breast cancer (93.6%) and breast cancer prevention (83.7%).

Keywords: Breast Cancer, BSE Behavior, Knowledge, Student.

Introduction

Breast cancer is a painless lump or thickening in the breast that appears in the lining (epithelial) cells of the ducts (85% of cases) or lobules (15% of cases) in the glandular tissue of the breast. Over

time, it can develop and invade surrounding breast tissue (invasive breast cancer) and then spread to nearby lymph nodes (regional metastasis) or to other organs in the body.

In Indonesia, the prevalence of breast cancer cases is 3,419,639, with an incidence of 1,092,029 cases and a mortality rate of 368,439 cases. Of these, data were obtained as many as 100 cases of breast cancer with a death rate of 6 people in the age range of 0-19 years so that Indonesia occupies the second position after India (WHO, 2020).

Risk factors for breast cancer are family history, menstrual history, pregnancy, and benign breast disease. Other possible factors can be estrogen, oral contraceptives, obesity, high fat diet, alcohol consumption, and smoking (Hero, 2021: 1534). According to the Collaborative Group on Hormonal Factor in Breast Cancer, 2012 in Susi Purwati, et al. (2021: 169) risk factors for breast cancer in women include age of menarche, age of menopause, age of pregnancy, length of breastfeeding, hormonal contraception, physical activity, smoking history, stress levels, obesity, and diet.

As recommended by the government, the most effective screening method is Breast Self Examination (BSE). BSE technique is very easy to do, but many women, especially adolescents, do not know this method and there are still many adolescents who do not care and are sensitive to abnormal symptoms in their breasts. Some studies suggest that there is a significant relationship between knowledge and BSE behavior.

Objective

The purpose of this review is to summarize the correlation between students knowledge and BSE Behaviour.

Method

The data collection method can be interpreted as a technique for obtaining data then analyzed in a study. The purpose of data collection is to find the data needed in the research stage (Masturoh, Imas. 2018). This research is a descriptive quantitative study with a cross sectional approach.

The research instrument used is a questionnaire containing questions to obtain accurate and objective data on the problems studied. In this study using a questionnaire about the independent variable, namely knowledge of the pathophysiology of breast cancer and breast cancer prevention.

For the knowledge variable using the Guttman scale, namely by making multiple choices.

For positive answers such as agreeing or being correct is given a score of 1 and for negative or wrong answers is given a score of 0 (Masturoh, Imas. 2018: 212). For correct answers to questions given 20 points and wrong answers given 0 points. The total value of the knowledge variable is 100 if all answers are correct.

Knowledge is also divided into three categories: good, sufficient and insufficient. It is considered good if a person is able to answer correctly 75-100% of the number of questions. It is stated that it is sufficient if someone is able to answer correctly 56-75% of the number of questions, while it is stated that it is lacking if someone is able to answer correctly 40-50% of the number of questions (Rachmawati, 2019: 17).

The data processing process in this study used the Statistical Package for Social Science (SPSS) 25 program and manually with the following stages of analysis: editing, coding, data entry, data tabulation, processing, and cleaning data. Data were analyzed univariately to see the description of the dependent variable, namely Sadari behavior and the independent variable, namely knowledge of pathophysiology and prevention of breast cancer. When univariate analysis has been carried out, the results will determine the characteristics or distribution of each variable and can be continued with

bivariate analysis. Analysis of the results of statistical tests using chi-square to conclude that the relationship between two variables is meaningful or not meaningful (Notoatmodjo, 2018: 183).

Results

The population in this study were all students at Ananda Bekasi Junior High School in 2022, totaling 218 people. The sample in this study were 141 female students.

Table 1. Frequency Distribution of BSE Behavior of Female Students at Ananda Junior High School Bekasi in 2022

BSE Behaviour	Frequency	Percentage
Never	129	91.5
Ever	12	8.5
Total	141	100

Based on the table above, the majority of respondents have never done BSE, namely 129 respondents (91.5%). Respondents who had done BSE were 12 respondents (8.5%). Different results were obtained in a study conducted by Mariyati, et al (2021) entitled "Relationship between Adolescent Knowledge and Breast Self-Examination Behavior". The results obtained from 40 respondents, 21 respondents (52.5%) had done BSE and 19 respondents (47.5%) did not do BSE. Respondents who do BSE have followed counseling from schools and posyandu.

According to the researcher, this shows that many adolescents have a risk of developing breast cancer but do not have the awareness to do BSE. One of the contributing factors is that they have not received counseling from health facilities in their area.

Table 2. Frequency Distribution of Students' Knowledge about Pathophysiology and Prevention of Breast Cancer at Ananda Junior High School Bekasi in 2022

Knowledge	Bad	%	Good	%	Total
Pathophysiology	132	93.6	9	6.3	141
Prevention	118	83.7	23	16.3	141

Based on the table above, it shows that the majority of respondents have bad knowledge about the pathophysiology of breast cancer as many as 132 respondents (93.6%) and breast cancer prevention as many as 118 respondents (83.7%). Respondents who had good knowledge about the pathophysiology of breast cancer were 9 respondents (6.3%) and breast cancer prevention was 23 respondents (16.3%).
Different results were obtained in a study conducted by Rini Deska, et al (2019) entitled "The Relationship of Knowledge About Breast Cancer with Sadari Behavior." The results obtained from 57 Midwifery student respondents, most of the respondents were in the good knowledge category, namely 25 respondents (43.8%).

According to researchers, the low level of knowledge of female students about the pathophysiology and prevention of breast cancer can be caused by the lack of information they get either through the school curriculum, social media, or family environment. The level of knowledge of junior high school students is certainly very different from Midwifery Academy students who have been exposed to information about breast cancer.

Table 3. Relationship between Knowledge about Pathophysiology and Prevention of Breast Cancer with BSE Behavior of Female Students at Ananda Junior High School Bekasi in 2022

	BSE Behaviour						95% OR	P Value
	Never Do BSE		Ever Do BSE		Total			
Knowledge	f(n)	%	f(n)	%	f(n)	%	107.25	
Bad	117	99.2	1	0.8	118	100	12.72 -	0.000
Good	12	52.2	11	47.8	23	100	903.92	
Total	129		12		141			

Based on the table above, it shows that respondents who have bad knowledge and have never done BSE are 117 respondents (99.2%). Respondents who had good knowledge and had never done BSE were 1 respondent (0.8%). Respondents who had good knowledge and had ever done BSE were 12 respondents (52.2%). Respondents who had good knowledge and had never done BSE were 11 respondents (47.8%).

According to the researcher's assumption, the respondents' low knowledge about the pathophysiology and prevention of breast cancer was influenced by the age factor. Respondents, who are mostly adolescents in the early adolescent phase, still have limited ability to digest and process information from outside, causing them to lack knowledge about the BSE procedure

Next, data testing was conducted to examine the relationship between the level of knowledge about the pathophysiology and prevention of breast cancer on BSE behavior using the Chi Square test. From the test results, the p value is 0.000 (p value <0.05), with an Odd Ratio of 107.25, so Ho is rejected. This means that there is a correlation between knowledge and the BSE behavior of female students at Ananda Junior High School Bekasi in 2022.

The results of this study are not in line with research conducted by Nurhanifah Siregar (2021) entitled "The Relationship between Knowledge and Sadari (Check Your Own Breast) Behavior as an Early Detection Measure for Breast Cancer in Class X Students at SMA Negeri 3 Padang Sidempuan City" with a p value = 0.826 (p value> 0.05) which proves that there is no relationship between knowledge and Sadari behavior. The same results were also carried out by researchers Linda Juwita, et al (2018) entitled "Knowledge of Breast Self Examination (Sadari) Towards Attitudes and Behavior in Adolescent Girls", namely p value = 0.607 (p value> 0.05).

According to the researcher, there are differences in research results between researchers and several other studies due to differences in the types of respondents, education levels, and research sites. Insignificant research results can be caused by respondents who do not have a history of breast cancer so they do not do Sadari even though they have a good level of knowledge.

Conclusion

The proportion of BSE behavior of female students at Ananda Junior High School Bekasi is still very low. The majority of respondents had poor knowledge of breast cancer pathophysiology and breast cancer prevention.There is a correlation between knowledge about the pathophysiology and prevention of breast cancer with BSE behavior.

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