

THE INFLUENCE OF BREAST CANCER EDUCATION ON INTEREST IN BREAST SELF-EXAMINATION (BREAST SELF-EXAMINATION) IN ADOLESCENTS AT AL-AMANAH VOCATIONAL SCHOOL, TANGERANG YEAR 2023

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Abstract

Background: Breast cancer, also known as mammary carcinoma, is a form of cancer that can affect anyone, both women and men. This disease develops in the mammary glands, fatty tissue, or in the connective tissue of the breast. Research Objective: To find out whether there is an impact of breast cancer education on teenagers' interest in doing BSE?. Research Method: This study uses an experimental method with a quasi-experimental type (Quasi Experiment) using a Pre-Test Post-Test design approach. Research Results: Based on the results of the research, it shows that there is an influence of breast cancer education on interest in BSE, the value of which is 6,517 and the p value = $0.000 < \alpha 0.05$ so that H_0 is rejected and H_a is accepted, indicating that there is an impact of breast cancer education on interest in self-examination of the breasts. at SMK AL Amanah Tangerang in 2023. Conclusions and suggestions: There is an influence of breast cancer education on interest in doing BSE after conducting Pre-Test Post-Test research and it is hoped that future researchers will carry out deeper research on breast cancer education and interest in carrying out BSE.

Keywords: Breast Cancer, BSE, Mothers Early Detection

Introduction

Breast cancer, also called mammary carcinoma, is a type of cancer that can attack anyone, both women and men. This breast cancer grows in the mammary glands, fatty tissue and connective tissue of the breast. Until now, breast cancer is still a frightening thing, especially for women, because breast cancer is identified as a malignancy that can result in death. The level of danger of malignancy and cancer in the breast is the same. However, the number of breast cancer sufferers is greater (around 90%) compared to breast malignancy sufferers (Kusumawaty et al., 2020).

The incidence of cancer worldwide reached 18 million cases in 2018, of the 18 million cancer cases worldwide, 8.5 million cases of breast cancer occurred in women and globally. The incidence of cancer in women globally is breast cancer which contributed 25.4%, ranking first of the total new cases diagnosed in 2018 (World Cancer Research Fund American, 2018).

Cancer is currently still the first most deadly disease in the world. Breast cancer is a type of malignant tumor that is still the number one killer of women. This is proven by the new diagnoses recorded by the World Health Organization (WHO) in 2018, 58,256 cases of breast cancer or 16.7% of the total 348,809 cancer cases (WHO, 2018).

Currently breast cancer often occurs in young women aged 13-25 years as many as 13 cases (4.2%) this is due to a lack of awareness of early detection of breast cancer among teenagers. This is

very important for young women to do because considering the large number of incidents adolescents affected by breast cancer (Sinaga, 2016).

The lack of information from various media, both print, electronic and cyber media, regarding cancer in efforts to prevent and control breast cancer is still minimal and has not become a top priority health problem among the community. Many people in the productive age group are still affected by breast cancer, this has led the Indonesian government to provide health promotion education about BSE (Breast Self-Examination) to the public, especially teenagers. BSE (Breast Self-Examination) or breast examination is a procedure that a woman can do to check breasts and underarm areas physically and visually to see changes (Stanford Children's Health, 2019).

There are efforts to control breast cancer that can be done with early detection. Early detection can reduce the death rate by 25-30%. One of the easiest preventive behavioral efforts to carry out is breast cancer screening by doing a breast self-examination or what is called BSE (Anggrainy, 2017).

Based on a preliminary study that was carried out at AL-Amanah Vocational School, Tangerang, it was carried out on 20 female students, the results were that before the education was carried out, only 4 female students had a high interest in doing BSE and it was found that 7 female students were interested in doing breast self-examination (BSE).) and 9 female students had low interest in carrying out breast self-examination (BSE). then after the education was carried out, the number of female students' interest in doing BSE increased to 10 female students who had a high interest in doing BSE and 6 female students who had a moderate interest in carrying out breast self-examination (BSE) and 4 female students who had a low interest in carrying out breast self-examination (BSE). Based on the results of the preliminary study above, the author is interested in conducting research on the influence of breast cancer education on interest in doing BSE, so researchers are interested in conducting research at AL-Amanah Vocational School, Tangerang.

Research Methods

The research design uses a Quasi Experiment with a one group Pre-Test Post-Test design approach. The method used in the pre-test post-test design is by giving a pre-test (initial observation) first before giving the intervention, then the researcher provides education to students about breast cancer, after the education is carried out the researcher again distributes the questionnaire to see the interest of teenagers in doing BE AWARE before and after education. The population in this study was the entire number of class The instrument for collecting data is a questionnaire with 20 questions, and hypothesis testing using the Wilcoxon Test because it is not normally distributed to find out whether the hypothesis is accepted or rejected.

Research Result

1. Respondent Characteristics

Table 1. Distribution of Respondents Based on Age of Class X Adolescents at AL-Amanah Vocational School Tangerang in 2023

Respondent Characteristics		
Age	f	Percentage%
13 years	5	10.0
14 years	9	18.0
15 years	20	40.0
16 years	16	32.0
Total	50	100

Based on table 4.1. It can be seen that the characteristics based on the age of class

Table 2. Average Distribution of Adolescents' Interest in Doing BSE Prior to Education at AL-Amanah Tangerang Vocational School in 2023

	Mi			Mean	Std.
	N	n	Max		Deviation
Adolescents' Interest in Doing BSE before Education	50	32	49	42.30	4.752

Based on table 4.2. shows that the average interest of teenagers in doing BSE before education is 42.30 and the standard deviation is 4,752 with a minimum interest value of 32 and a maximum value of 49, meaning that teenagers' interest in doing BSE is in the medium interest category.

Table 3. Average Distribution of Adolescents' Interest in Doing BSE After Education at AL-Amanah Tangerang Vocational School in 2023

	N	Min	Max	Mean	Std.
					Deviation
Adolescents' Interest in Doing BSE After Education	5	51	71	65.50	4.858

Based on table 5.4. shows that the average interest of teenagers in doing BSE after education is 65.50 and the standard deviation is 4,858 with a minimum interest value of 51 and a maximum value of 71, meaning that teenagers' interest in doing BSE after education is in the good interest category.

Table 4. Influence of Breast Cancer Education on Adolescents' Interest in Carrying out BSE at AL-Amanah Tangerang Vocational School in 2023

Variable	N	Mean	z	p
Adolescents' Interest in Doing BSE After Education	50	42.30	6.15	0,00
Adolescents' Interest in Doing BSE Before Education	50	65.50		

Based on table 5.5, it shows that the statistical test results obtained a calculated z value of 6.157 and p value = 0.000 < alpha 0.05, so H0 is rejected and Ha is accepted, meaning that there is an influence of breast cancer education on interest in carrying out breast self-examination at AL-Amanah Vocational School, Tangerang, Year 2023.

Discussion

1. Teenagers' interest in doing BSE before education is carried out at AL-Amanah Tangerang Vocational School in 2023 The research results showed that the number of respondents was 50 female students. Based on table 4.2, before counseling about breast cancer was carried out, the results showed that the average interest of teenagers in doing BSE was in the category of moderate interest in carrying out self-examination. Based on the results of respondents' answers during the pretest, most female students did not know about the benefits, guidelines and methods of BSE examination. Siwa did not know that BSE behavior can start during adolescence, where teenagers' curiosity is still high so it is important to provide correct health information.

The results of the questionnaire observations showed that respondents with low interest scores, the majority of respondents chose the answer strongly disagree and agree from questions points 1 to 20, namely the statement regarding whether BSE can only be done on women aged > 35 years, it must be done regularly once a month and aims to to detect breast cancer early. With BSE, respondents no longer need to consult a doctor if they find breast abnormalities. And there are still many students who choose the answer of strongly agreeing that only women who have families with breast cancer need to do BSE, so students feel that they don't need to do BSE as long as they don't have breast complaints and BSE is only done by health workers. Of the 20 question points given to respondents, the majority received scores of 1 and 2, which means that in the pretest results there were still many respondents who did not know about the dangers of breast cancer.

A person's lack of interest and knowledge can be influenced by a lack of information. According to Notoatmodjo, 2014; (Farasari, 2023), a person can obtain information from previous habits and experiences. Obtaining sources of information from experience also has an impact on a person's maturity in thinking to be creative in doing something new. Experience can be used as a basis for building or encouraging people to continue to get used to carrying out activities and actions by developing the skills they have. Facts and linked to the theory of Notoatmodjo (2014); (Farasari, 2023), that this theory is in accordance with the facts on the ground. It can be seen that someone who has never received information before tends to have low interest or low category interest. This can affect the understanding and thinking patterns of teenagers at school age, besides that their abilities will also be less compared to someone who has received information about breast self-examination.

2. Adolescents' interest in doing BSE after education at AL-Amanah Tangerang Vocational School in 2023

Based on the research results, it shows that the average interest of teenagers in doing BSE after education is 65.50 and the standard deviation is 4,858 with a minimum interest value of 51 and a maximum value of 71, meaning that teenagers' interest in doing BSE after education is in the good interest category. Based on the results of respondents' answers during the posttest, most of the female students already knew about the benefits, guidelines and methods of BSE examination. Siwa has chosen the answers strongly agree and agree for all question items points 1 – 20.

According to the opinion of researchers as many as 50 respondents, when health education was taking place, female students paid close attention so that they could increase their knowledge and interest about BSE examinations. The reason for the increase in interest scores among female students is because they are interested in paying attention to health education about BSE. Based on information from female students, there had never been any health education activities regarding BSE examinations at school, so this encouraged female students to pay attention to the material presented.

Observation results from collecting questionnaires show that respondents with low interest scores, the majority of respondents have chosen the answer strongly agree and agree from questions points 1 to 20, namely the statement regarding whether BSE can only be done on women aged > 35 years, it must be done regularly once a month and aims to detect breast cancer early. With BSE, respondents no longer need to consult a doctor if they find breast abnormalities. And there are still many students who choose the answer of strongly agreeing that only women who have families with breast cancer need to do BSE, so students feel that they don't need to do BSE as long as they don't have breast complaints and BSE is only done by health workers. Of the 20 question points given to respondents, most of them got scores of 1 and 2, which means that in the pre-test results there were still many respondents who did not know about the dangers of breast cancer.

Based on this data, it can be shown that health education carried out by adding videos can stimulate the senses of hearing and sight in teenagers and will help to generate a sense of "curiosity" thereby generating interest in conducting early breast cancer detection screening. The increase in knowledge that occurred in this research has a positive relationship with changes in interest in teenagers to carry out breast self-examination (BSE) regularly. This also proves the truth that knowledge can influence a person's interest. A person's interest is a form of individual belief about the desire to do something.

This is in line with research by (Hapsari & Dwihestie, 2022) that the better a person's knowledge of something, the greater the person's interest. A person's knowledge will influence that person's interests and treatment. The higher a person's knowledge of the importance of early breast cancer screening and education, the higher a person's interest and desire to carry out breast self-examination (BSE). A person's interest can arise after the person knows (sees, hears). So in this case the video is very important to change someone's interest in doing BSE.

Research (Farasari, 2023) states that education about health is any planned effort to change the mindset of individuals, groups or society to a more positive direction through the learning process with the aim of conveying messages & information about health. There are several factors that influence education about health, such as level of education, socio-economic level, customs, community beliefs, and availability of time in the community. In carrying out education about health, it cannot be separated from the methods used, such methods as individual education methods (individuals), group education methods (lectures), as well as mass or public education methods.

3. The Influence of Breast Cancer Education on Adolescents' Interest in Carrying out BSE at AL-Amanah Tangerang Vocational School in 2023.

The statistical test results obtained a calculated z value of 6.157 and a p value = 0.000 < alpha 0.05, so there is an influence of breast cancer education on interest in carrying out breast self-examination at AL-Amanah Tangerang Vocational School in 2023. These results indicate that there is interest in carrying out BSE examinations. as expected, namely respondents experienced an increase in interest for the better. These results are in line with research (Hapsari & Dwihestie, 2022) which shows that the t value of 12.497 is greater than the t table value of 2.036, meaning that there is an influence of education about breast cancer on the interest in carrying out breast self-examination (BSE) among female students at PMR SMAN 1 Jatinom Klaten.

Based on the results of research conducted by (Annisaa, Fauzia, & Maulina, 2023) it is also stated that there is an influence of providing health education using video media on teenagers' interest in carrying out breast self-examination (BSE). The results of data analysis using the Wilcoxon test show that the "Z Score" on the pretest and posttest is -5.138b with an Asymp value. Sig. (2-tailed) 0.000 so it can be interpreted that the P value < 0.05.

Supported by research (Metasari & Nurlina, 2023) from the results of the Wilcoxon test = a p value of 0.000 was obtained, indicating that health education influences the ability of teenagers to detect breast cancer early. This means that adolescents' ability to practice BSE can be improved through health education using the demonstration method, which uses all the five senses to teach and practice BSE steps directly.

Educational media plays an important role in influencing people's understanding, interests and behavior. Choosing interesting educational media is important in providing health education. Video media is a medium that utilizes audio and visual functions. According to (Purwati & Andiani, 2023) audio visual media has four functions, namely attention function, affective function, cognitive function and compensatory function. The attention function is to attract participants to concentrate, the affective function can be seen in the level of seriousness of the participants in listening to the material, the cognitive function is used by researchers to facilitate the achievement of goals to understand and remember the information presented and the compensatory function aims to help condition participants who are weak and slow in understanding the material properly. verbal only.

The principle used in this research is to give the same treatment to each respondent, namely that each respondent can see clearly how the process of early breast cancer detection is carried out using videos that are shown together without making any distinctions. At the pretest and posttest stages, all respondents had the same opportunity and time to complete the questionnaire provided. However, the final results for each participant were different. This is influenced by the quality of a person's reception of new information. However, respondents already knew the purpose of breast self-examination (BSE) is an examination carried out independently to detect lumps and/or other abnormalities that indicate breast cancer. And increases a person's desire to carry out breast self-examination with the aim of detecting early signs of breast cancer.

After the intervention was carried out, there was an increase in interest after being given counseling. This happened because the increase in the average value of respondents' interest after being given counseling about BSE was influenced by several factors, one of which was information. This is in accordance with what was stated by Notoatmodjo (2010); (Farasari, 2023), that there are various ways that can increase female students' knowledge about breast self-examination, one of which is by providing health education which occurs because of a change in awareness within the individual himself to increase knowledge through practical learning techniques with the aim of remembering the facts / real conditions by providing encouragement for self-exertion. With increased knowledge after counseling and demonstrations regarding BSE, it can increase interest in carrying out breast examinations.

The higher a person's interest in information that they have never heard or received before, the person will be more motivated in providing health education. Health education using demonstration or video methods can improve students' abilities because this method involves all the senses to receive information and is provided directly by researchers regarding BSE examinations. This is in accordance with the opinion of (Emilia, Sunarti, & Wulandari, 2021), namely that the more five senses are used, the clearer the meaning or comprehension obtained so that female students are able to practice BSE skillfully. Apart from that, health education is very effective in increasing young women's knowledge about BSE, especially if the delivery is supported by proven effective methods, namely lectures and demonstrations.

According to the researcher's assumption, the results of this research can be said to be the same as theory and related research, namely that respondents who previously had low interest could be increased to a high interest category by using group education methods or lectures through demonstrations, giving leaflets and practicing together by providing education. health. Breast self-examination (BSE) is certainly one of the effective measures to be able to detect early symptoms of breast cancer and reduce the high death rate from breast cancer. BSE can be done independently in an easy way without incurring costs and it is hoped that SADARI can be applied to all levels of society.

Conclusion

1. Adolescents' interest in doing BSE before education is 42.30 and the standard deviation is 4,752 with a minimum interest value of 32 and a maximum value of 49, meaning that adolescents' interest in doing BSE before education is in the medium interest category.
2. Teenagers' interest in doing BSE after education is 65.50 and the standard deviation is 4,858 with a minimum interest value of 51 and a maximum value of 71, meaning that teenagers' interest in doing BSE after education is in the high interest category.
3. There is an influence of breast cancer education on interest in carrying out breast self-examination at AL-Amanah Tangerang Vocational School in 2023. The results of statistical tests obtained a calculated z value of 6,157 and a p value = 0.000 < alpha 0.05.

Suggestion

1. For Respondents:
It is hoped that respondents will be able and willing to carry out breast self-examination regularly every month, as well as carry out education with peers so that more and more people know about the importance of BSE.
2. Divide the research location
For AL-Amanah Tangerang Vocational School, it is hoped that it can collaborate with local health facilities to hold regular adolescent reproductive health education activities.
3. For Institutions
Researchers hope that the results of this research can be used as a new source of data and provide scientific and health developments regarding the influence of breast self-examination health education (BSE) and conducting outreach activities about BSE in schools to be further improved so that more and more female students can know the importance of doing BSE.
4. For Further Researchers
The results of this research can be used as a reference source and material for further research. And the suggestion for future researchers is to use other educational media in conducting research so that they can develop this research followed by measuring respondents' skills in conducting BSE.

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