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The effect of breast self-examination on consciousness skills in fertilizing age

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ABSTRACT

Background: Breast cancer is the second cause of death. Risk factors are genetics, age at menarche, primi gravida, obesity and physical activity. The age frequently affected is between 40-55 years. Many cancers are detected too late so treatment is too late. Awareness and sadism are early detection to find out whether someone has breast cancer. Method: Pre-experimental research type. Pre test-post test design (one group pre and post design). The research design uses a pre-test and post-test in one group. The population is all WUS in Sobawagoli Village in 2023, totaling 67 women. The number of samples used was 30 people obtained using purposive sampling techniques. The data analysis technique uses the Wilcoxon sign rank test. Results: BSE knowledge before intervention and after the mean value was increased after 9.5 and for BSE skills: 13.5. There is an effect of the BSE demonstration on knowledge and BSE skills, namely p = 0.00 < of the value α = 0.05. Conclusion: There is an influence between the BSE demonstration on the knowledge and skills of WUS in Sobawagoli Village in 2023. So it will be an early detection of the incidence of breast cancer.

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1. Introduction

According to WHO, around 70% of cancer deaths in the world occur in low-income countries, around 9.6 million people in the world died from cancer in 2018 (Lasari et al., 2018). The second cause of cancer death after lung cancer is breast cancer. In 2022, the world will reach 16.5% or 65,858 million new cases of breast cancer (Nurohmat et al., 2022). In Indonesia, breast cancer is the highest cancer that occurs (Ningrum & Rahayu, 2021). Breast cancer cases in Indonesia 2022 The incidence of cancer in Indonesia is 22,430 million or 9.6% of all cancer deaths. The incidence of breast cancer in North Sumatra, namely at Adam Malik Hospital in 2019, was 323 people (Sigalingging et al., 2021). Prevalence of Cancer Causes of breast cancer Currently it is not known what causes these cells to become cancer cells. However, there are allegations that genetic, lifestyle, environmental and hormonal factors are related to the formation of breast cancer. According to Hero 2021, the causes of breast cancer are family history, age at menarche, primi gravida, nullipara, obesity and physical activity (Hero, 2020), (Sigalingging et al., 2021) (Azmi et al., 2020). An obese body condition also influences the incidence of breast cancer (Purwanti et al., 2021). The characteristics of women who often develop breast cancer are aged 40-55 years. This risk will be 10 times greater if someone in the family has breast cancer because it is related to genetics so

that their offspring can get breast cancer too (Herawati et al., 2022). Breast cancer is related to the woman's knowledge because many cases of breast cancer are not detected or treated so it is too late and cannot be treated anymore (Dyanti & Suariyani, 2016). One of the treatments for breast cancer is surgery (Panichella et al., 2023).

The Breast cancer has a big chance of being cured if it is found at an early stage by carrying out early detection "Self Breast Check" or BSE is an early detection effort that is easy for every woman to do to find lumps or other abnormalities in the breast. If BSE is carried out regularly, it will be known whether there were lumps or abnormalities in the breast before, even though they were still small (Mulyanti et al., 2021), (Ketut, 2022). BSE will also be more effective if done at a young age, namely on average for women of productive age 15-49 years (Ningrum & Rahayu, 2021). Women at this age are at risk of developing breast tumors or cancer. However, until now women's awareness of the practice of BSE is still low, namely only around 25%-30% of women in the world practice BSE. aware that it will be more effective as an early treatment for breast cancer to prevent metastases from occurring (Wahab et al., 2023). In Indonesia, according to the Indonesian Ministry of Health (2017), 53.7% of people have never done BSE, 46.3% have done BSE, and 95.6% of people have never done SADANI. The Indonesian government has launched the Indonesian Women's Cancer Prevention and Early Detection Movement in 2015. In the city of Semarang, SADARI has been implemented to detect breast cancer (Mulyanti et al., 2021). This activity aims to increase public awareness about controlling risk factors and early detection of cancer.

Breast Self-Examination (SADARI) or Clinical Breast Examination (SADANIS) has been widely carried out using various methods and disseminated to the community through WhatsApp (Lasari et al., 2018). Health promotion can be done through counseling. Counseling to increase public knowledge and awareness about healthy living. Extension has many methods, one of which is the demonstration method. The demonstration method is a way of presenting lessons by demonstrating and showing the audience a process, a certain situation, real or just an imitation. The role of the audience in a demonstration is just to pay attention, but the demonstration provides concrete learning. The advantage of the demonstration method is verbalization, observation through demonstration. According to Marfianti 2021, there was an increase in knowledge of PUS after practicing BSE on the manikin (Marfianti, 2021). At this time it has been proven that the distribution of information on BSE is via the Android application. So it is hoped that every WUS who has an Android can know the method from SADARI (Nurohmat et al., 2022).

The main aim of SADARI is to help women in early detection of the possibility of breast cancer by observing the breast from the front, side left and. Early detection of breast cancer so that there is no delay in treating breast cancer because there is a relationship between the detection of breast cancer and the incidence of breast cancer until it is treated. The steps in carrying out a breast self-examination (BSE) are as follows: Take off your top clothes, stand straight with your hands straight up. lower. Pay attention to any changes in the shape and surface of the breast skin, swelling and/or changes in the nipples. Raise both arms up, bend your elbows and position your hands behind your head. push your elbows forward and look closely at your breasts; and push your elbows back and look at the shape and size of your breasts. Most women have breasts that are not the same size (the right breast is bigger or smaller than the left). Place both hands on your waist, lean your shoulders forward so that your breasts hang down, and push your elbows forward, then tighten (contract) your chest muscles. You, Raise your left arm up, and bend your elbow so that your left hand is holding the upper part of your back. Using the fingertips of your right hand, touch and press the breast area, and look closely at the entire left breast down to the armpit area. Do up-down movements, circular movements and straight movements from the edge of the breast to the nipple, and vice versa. Repeat the same movement on your right breast. Check whether there is fluid coming out of the nipple by placing your thumb and index finger around the nipple, then press gently and see if any fluid comes out. Repeat with the other breast. In a lying position, place a pillow under your right shoulder. Raise your arms up. Look closely at the right breast and do the three movement patterns as before. Using the tips of your fingers, press all parts of the breast up to around the armpit.

Knowledge is knowledge that is general or complete, has a logical method and is explained systematically. Science will always develop because humans have the ability to think and have a high sense of curiosity. Complex curiosity requires a systematic way to acquire knowledge. There are 6 (six) levels of knowledge included in the cognitive domain; know, understanding, application, analysis, synthesis, evaluation. Skills are an individual's ability to carry out actions that begin with receiving certain learning experiences. Skills show certain behavior or changes with meaning contained in a person's mental or brain activity which is basically an advanced stage of cognitive learning outcomes (understanding something) and effective learning outcomes. Knowledge, attitudes and availability of facilities as well as the behavior of health workers as facilitators are components that can determine a person's skills. The contribution of this research is to find out the influence of the awareness examination demonstration on the skills of WUS in Sobawagoli Village to carry out awareness. This research greatly contributes to the community, especially women of childbearing age in Sobawagoli Village, to improve the skills of women of childbearing age in carrying out awareness

2. Methods

The type of research used was pre-experimental, namely real research carried out by random sampling (Sastroasmoro & Ismael, 2013). The design used in this research was pre test-post test (one group pre and post design). This research design uses a pre-test and post-test in one group. The population in this study was 67 women of childbearing age in Sobawagoli Village in 2023. The sample in this study was women of childbearing age in Sobawagoli Village whose collection was carried out using purposive sampling, namely selecting samples based on certain characteristics, totaling 30 people. This research was carried out in Sobawagoli Village. BSE knowledge and skills were measured before and after the BSE demonstration using a questionnaire instrument and the data was tested with the Wilcoxon Rank test, which is to measure the significance of two groups in pairs (Dahlan, 2015).

3. Results and Discussion

3.1 Knowledge before and after the BSE demonstration

This analysis was carried out to determine the average before and after the intervention of BSE examination skills in women of childbearing age in Sobawagoli Village. The results of this analysis can be seen in the following table.

Table 1
Average BSE knowledge before and after intervention was given to women of childbearing age in Sobawagoli Village

Knowledge BSE examination	Intervention group (N=30)				
	Min	Max	Mean	SD	Different Means
Before intervention	3	7	4,27	1,14	9,5
After intervention	12	15	13,77	0,89	

Based on the table above, it can be seen that BSE knowledge before the intervention has a mean value of 4.27 and a standard deviation of 1.14. After the intervention there was an increase in BSE knowledge with a mean value of 13.77 and a standard deviation of 0.89 50 and the mean difference before and after 9.5.

Table 2
Average BSE skills before and after intervention was given to women of childbearing age in Sobawagoli Village

Knowledge BSE examination	Intervention group (N=30)				
	Min	Max	Mean	SD	Different Means
Before intervention	6	16	11,6	2,34	13,63
After intervention	24	26	25,23	0,50	

Based on the table above, it can be seen the BSE skills before the intervention with a mean value of 11.6 and standard deviation after the intervention, there was an increase in BSE skills with a mean value of 25.23 and a standard deviation of 0.50 and the mean difference before and after was 13.63.

Table 3
Effect of breast self-examination on BSE knowledge in women of childbearing age in Sobawagoli Village

Knowledge BSE examination	Intervention group (N;30)			
	Mean (±SD)		Different Means	P
Before Intervention	4,27	(1,14)	9.43	0,000
After Intervention	13,7	(0,89)		

* *Wilcoxon sign rank*

Based on the table above, it is known that from 30 respondents, the average knowledge score before being given the intervention was 4.27 and after being given the intervention there was an increase in skills with a mean of 13.7 with a mean difference of 9.43. The statistical test results show that the value p = 0.00 < the value α = 0.05, so Ho is rejected and Ha is accepted. It can be concluded that there is an influence of breast self-examination on knowledge of BSE skills in women of childbearing age in Sobawagoli Village.

Table 4
Effect of breast self-examination on BSE skills in women of childbearing age in Sobawagoli

BSE examination skills	Intervention group (N;30)			
	Mean (±SD)		Different Means	P
Before Intervention	11,6	(2,34)	13,6	0,000
After Intervention	25,2	(0,50)		

* *Wilcoxon sign rank*

Based on the table above, it is known that from 30 respondents, the average skill score before being given the intervention was 11.6 and after being given the intervention there was an increase in skills with a mean of 25.2 with a mean difference of 13.6. The statistical test results show that the value p = 0.00 < the value α = 0.05, so Ho is rejected and Ha is accepted. It can be concluded that there is an influence of breast self-examination on women of childbearing age in Sobawagoli Village.

3.2 Analysis

Knowledge of BSE before and after intervention in women of childbearing age in Sobawagoli Village

Based on the research results, it was found that BSE knowledge before the intervention had a mean value of 4.27 and a standard deviation of 1.14. Based on the results of the questionnaire, it was found that many respondents still answered incorrectly for question number 1, which meant BSE, 21 people, question number 2, benefits of BSE, 22 people, question number 4, age when it is best to do BSE, 23 people, question number 5, time to carry out BSE, 23 people. Based on the results of the assessment, it was found that respondents did not know about the BSE examination so that almost all respondents could not demonstrate the 6 steps of the BSE examination. Question number 7, whether the BSE activity costs 23 people, question number 9, the initial stage of the BSE examination, was 22 people, question number 10, which fingers. 24 people used it to feel their breasts, 25 people asked question number 13 about abnormal color of the breasts and 22 people asked question number 14 about the technical implementation of BSE. A person's level of knowledge will increase by providing a medium with which a person is immediately able to see and implement their skills automatically increasing (Lasari et al., 2018). The results of this research are also in line with the results of research by Maresa et al in 2023 in Palembang that exposing a person to information by providing counseling will increase a person's knowledge, namely the univariate of 58 teenagers showed that 82.5% had good knowledge and

the bivariate result was an attitude relationship (p-value 0.005< 0.015) and exposure to information (p-value 0.007 < 0.05) with knowledge of young women about breast cancer at MTS One Roof Talang Jawa OKI in 2021(Maresa et al., 2023). The results of the research showed that after being given health education interventions, there was an increase in BSE skills with a mean value of 13.77 and a standard deviation of 0.89, with respondents' knowledge scores in the range 12 - 15. Based on the research results, this happened because of the intervention to increase knowledge through outreach with the media. The leaflet provides additional information about BSE, including the meaning of BSE, the purpose of BSE, when to do BSE, the benefits of BSE, steps to do BSE. Based on the results of the questionnaire, it was also discovered that the majority of respondents had answered correctly to all questionnaire items. Knowledge is the result of knowing, and this occurs after people sense a particular object. Sensing occurs through the five human senses, namely the senses of sight, hearing, smell, taste and touch. Most human knowledge is obtained through the eyes and ears. Human knowledge is received or captured through the five senses. Leaflets can be widely distributed and are a useful way to convey information to someone. The results of this research are also in line with the fact that providing counseling or information can increase a person's knowledge, as was done by Mesrida Simarmata in 2020 by providing education that can improve modern wound care (Simarmata et al., 2023)

BSE skills before and after intervention in women of childbearing age in Sobawagoli Village

Based on the research results, it was found that BSE skills before the intervention had a mean value of 11.6 and a standard deviation of 2.34. Based on the assessment results, it was found that respondents did not know about the BSE examination so that almost all respondents could not demonstrate the 6 steps of the BSE examination. This can be seen from each item of the inspection step which shows that the majority of respondents got a score of 1 (done but not perfect). The most checklist items that were not completed by respondents were in step 2, namely paying attention to size, shape, contour, color, the presence of traction on the breasts and nipples from the front, right and left sides. This is because the majority of respondents do not know about the BSE examination procedure so they are not able to practice BSE properly. Before being given BSE counseling, there was 1 respondent who was skilled in doing BSE. From the results of interviews conducted by researchers, 1 respondent had received information about BSE from television or mass media. This is in accordance with where the factors that influence skills include facilities and infrastructure factors, the amount of learning that a person has obtained will influence a person's skills in taking action. Based on the research results, it is known that after the intervention there was an increase in BSE skills with a mean value of 25.23 and a standard deviation of 0.50 with a mean difference of 13.6. Based on the assessment results, almost all respondents were skilled in carrying out BSE examination skills with a score of 3, namely the procedural steps were carried out correctly and independently. One of the early detection methods for breast cancer is early detection so that it can be treated early while the lump still does not become high-stage cancer and avoid death. (Eismann et al., 2020) that it is important to raise awareness of doing BSE to motivate women to regularly do BSE. The higher a person's interest in information that they have never heard or received before, the person will be more motivated in the process of providing counseling. They will pay close attention so that the information provided can be easily accepted by respondents. These results are in accordance with the results of Nurohmat's research that skills are influenced by the platform factor in providing information, such as in his research using an Android application, thereby improving skills in self-examination of breasts(Nurohmat et al., 2022). The research results obtained also illustrate that respondents have a great interest in listening to and seeing demonstrations on Android. This can be seen from the average score after being given counseling which is higher than before being given counseling and the majority of respondents are said to be skilled.

The influence of breast self-examination on BSE knowledge in women of childbearing age in Sobawagoli Village

Based on the research results, it shows that there is an effect of breast self-examination on BSE knowledge in women of childbearing age in Sobawagoli Village, with a value of p = 0.00. This is because increasing a person's knowledge can be influenced by health education. Health education can be done

using various media. Media is a tool used by educators in conveying educational or teaching materials. The more five senses are used, the more and clearer the understanding or knowledge will be. Health education using leaflet media is very effective in conveying short and concise messages. This media is easy to carry and distribute. Leaflets are media in the form of a sheet of paper with pictures and writing on both sides of the paper and folded so that they are small and practical to carry. This media contains ideas about the main issue directly and explains how to take action in a concise and straightforward manner. The results of this research are in line with research conducted which states that health education about breast self-examination has several effects on knowledge and respondents. The frequency of receiving knowledge or information about breast self-examination will make it easier for women to apply breast self-examination techniques every day. This research is also in line with research conducted byjauhari in 2016 with the results of using leaflet media in effective health promotion to increase a person's knowledge. According to researchers' assumptions, media in providing health education is very important because with media the message you want to convey can be more easily absorbed. In this research, the effective media used was leaflets. Leaflet media can help women of childbearing age to receive learning using their five senses. The more senses that are used to receive learning, the more learning that can be absorbed. The effect of breast self-examination on BSE skills in women of childbearing age in Sobawagoli Village. Based on the research results, it shows that there is an effect of breast self-examination on BSE skills in women of childbearing age in Sobawagoli Village (p=0.000), counseling using the demonstration method can improve the skills of respondents. Because this method involves all the senses to receive information and is given directly by the counselor regarding the BSE examination. Health education regarding breast self-examination among respondents showed that there was a significant influence of health education on the level of knowledge of health cadres. Research conducted by researchers shows that there is an influence of implementing breast self-examination (BSE) on increasing the ability of women of childbearing age to detect breast cancer. The results show that there is an influence of health promotion with the module on the health belief model in breast self-examination (BSE) in WUS in Sobawagoli Village. The demonstration method is a way of presenting lessons by demonstrating and showing the audience a process, a certain situation, real or just an imitation. The role of the audience in a demonstration is just to pay attention, but the demonstration provides concrete learning. The advantages of this demonstration method are verbalization, observation through demonstration. The awareness examination demonstration method is an appropriate way to teach correct awareness techniques to women of childbearing age. Because by carrying out this action, it is hoped that the respondent will be able to do it correctly. It is proven from the research results that respondents are more skilled in carrying out BSE. The increase in respondents' skills after being given counseling was due to the availability of good facilities and infrastructure. The researcher assumes that by doing a self-examination breast demonstration, the respondent will increase their knowledge and by trying it they can improve their skills because someone directly trains them and the respondent has experience in doing it themselves so they are more confident and feel capable of being confident. This is proven by the results of the Wilcoxon Test statistical test that there is an effect of the Breast Care Demonstration on increasing respondents' skills in self-examining their breasts.

4. Conclusion

Based on the results of research entitled "The effect of breast self-examination on BSE skills in women of childbearing age in Sobawagoli Village", the following conclusions can be drawn: There is a difference in BSE knowledge before and after the intervention was given with a mean difference of 9.5. There is a difference in respondents' skills regarding BSE examination before and after intervention with a mean difference of 13.63. There is an influence of breast self-examination education on BSE knowledge in women of childbearing age in Sobawagoli Village (p=0.000). There is an influence of breast self-examination on BSE skills in women of childbearing age in Sobawagoli Village. (p=0.000). The limitation of this research is that it only carried out one demonstration and immediately assessed the respondent's skills. In future research, it is possible to provide a time span and provide a combination of methods, perhaps with a demonstration and video that the respondent can repeat before being assessed again or something else

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