

HOW COUNSELING CAN INCREASE AWARENESS AND PERCEPTION OF VULNERABILITY TO EARLY DETECTION OF BREAST CANCER

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ABSTRAK

Article History:

Submitted: 21/01/2023

Accepted: 19/02/2024

Published: 25/03/2024

Keywords:

Health Education;

SADARI;

Perceived Susceptibility

Abstract:

SADARI (Breast Self-Examination) is one of the early detection of breast cancer and a role in the discovery of early-stage breast cancer. Awareness about SADARI is an educational activity with the spread of messages to improve the implementation of SADARI and the perceived susceptibility of adolescents in the early detection of breast cancer. This research aims to determine the influence of counseling about awareness (breast self-examination) on implementing SADARI and perceived susceptibility to early detection of breast cancer in the Muhammadiyah Senior High School City of Kediri in 2022. Pre-experiment research with one group pre-test and post-test design. Population all student XI Muhammadiyah Senior High School with a sample size of 37 with a total sampling technique. The instrument is a questionnaire and statistics test by the Wilcoxon test. The results can be interpreted that before counseling on BSE, almost all respondents had less than 33 respondents (89.2%). After counseling, some respondents had the implementation of BSE in the medium category, namely 18 respondents (48.6%). Before counseling on BSE, almost all respondents had low perceived susceptibility, 25 respondents (67.5%). After counseling, most respondents had perceived susceptibility in the high category, namely 24 respondents (64.9%). The results by Wilcoxon test obtained p value = $0.000 < \alpha = 0.05$, which means there is an extension of awareness about SADARI on the implementation of SADARI and perceived susceptibility early detection of breast cancer. It is hoped that the youth will perform SADARI regularly and independently to detect early breast cancer.

Abstrak:

SADARI (Pemeriksaan Payudara Sendiri) merupakan salah satu pendeteksi dini kanker payudara dan berperan dalam penemuan kanker payudara stadium awal. Kesadaran tentang SADARI merupakan kegiatan edukasi dengan penyebaran pesan untuk meningkatkan implementasi SADARI dan persepsi kerentanan remaja dalam deteksi dini kanker payudara. Penelitian ini bertujuan untuk mengetahui pengaruh penyuluhan tentang kesadaran SADARI (Pemeriksaan Payudara Sendiri) terhadap pelaksanaan SADARI dan persepsi kerentanan terhadap deteksi dini kanker payudara di SMA Muhammadiyah Kota Kediri tahun 2022. Desain penelitian pre-eksperimental dengan pendekatan desain pre-test dan post-test. Populasi seluruh siswa SMA Muhammadiyah XI Muhammadiyah dengan jumlah sampel 37 dengan teknik total sampling. Instrumen penelitian adalah kuesioner dan lembar observasi dengan uji statistik menggunakan uji Wilcoxon. Hasil yang ditunjukkan sebelum dan sesudah konseling, dapat diartikan bahwa sebelum konseling pada BSE, hampir semua responden memiliki kurang dari 33 responden (89,2%). Sementara itu, setelah penyuluhan BSE, beberapa responden melakukan implementasi BSE pada kategori menengah yaitu 18 responden (48,6%). Sebelum konseling tentang BSE, hampir semua responden memiliki persepsi kerentanan yang rendah, 25 responden (67,5%). Sementara itu, setelah penyuluhan BSE, sebagian besar responden telah merasakan kerentanan pada kategori tinggi yaitu 24 responden (64,9%). Hasil uji Wilcoxon diperoleh nilai $H_0 = 0,000 < \alpha = 0,05$, yang berarti ada perluasan kesadaran tentang SADARI (Pemeriksaan Payudara Sendiri) terhadap pelaksanaan SADARI dan persepsi kerentanan deteksi dini kanker payudara di SMAN Muhammadiyah Kota Kediri. Diharapkan para pemuda akan melakukan SADARI secara rutin dan mandiri untuk mendeteksi dini kanker payudara.



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How to Cite:

S. Wulandari, E.Y. Viridula, K. Novita, Y. Anggraini,
“How Counseling can Increase Awareness and
Perception of Vulnerability to Early Detection of
Breast Cancer”, Indonesia. J. Heal. Sci., vol. 8, no. 1,
pp. 130-136, 2024.

INTRODUCTION

Breast cancer is the uncontrolled growth of breast cells. Usually, old breast cells will die and be replaced by new, more potent cells; this cell regeneration helps maintain breast function [1]. Breast cancer is classified as a type of cancer that grows fast. Breast cancer status from stage one to unhelped only takes about a year [2].

WHO (*World Health Organization*) estimates the incidence of breast cancer is 11 million, and by 2030, it will increase to 27 million cancer deaths [3]. According to the data (Global Risks, 2014), There were 1.67 million new cases of breast cancer (25% of all cancers) in the world in 2012, with 883,000 more patients in developing countries compared to 794,000 in developed countries [5]. Breast cancer deaths rank fifth overall cancer deaths (522,000) and are the leading cause of cancer death in women in developing countries (324,000), accounting for 14.3% of total deaths. WHO also says 8-9% of women will experience breast cancer in their lifetime.

According to the *American Cancer Society* (ACS), breast cancer incidence rates have increased in many Asian and African countries. In Miyagi, Japan, the incidence rate increased by 140% over 30 years. In Chennai, India, the incidence rate increased by 40% in 20 years [6]. The incidence rate has decreased in the United States, Britain, France, and Australia. Even breast cancer deaths have tended to stabilise or decline in North America and Europe over the past 25 years, which has been linked to early detection. In Asian countries like Japan and Korea, deaths are increasing due to lifestyle changes and late screening and early detection programs.

Data in Indonesia around 40-70% of women who check themselves for breast cancer are already at an advanced stage. The cure rate for location I in breast cancer can reach 95%, stage II by 70%, and stage III is between 40-50% [7]. Based on Hospital Information System (SIRS) data in 2011, breast cancer ranks first in inpatient

cancer patients in all hospitals in Indonesia (16.85%). In addition, data [8] shows that breast cancer is also the highest cancer suffered by Indonesian women, with an incidence rate of 26 per 100,000 women [9] [10].

Based on Prevalence data and Estimated Number of Breast Cancer in Women in (⁰/₀₀). According to the Province in 2013, Central Java province ranks first with the number of breast cancer patients with an estimated absolute number of 11.511, while East Java province ranks second with an estimated total number of 9,688 and third place in West Java province with an estimated final number of 6,701 (Dinkes, 2013).

Based on a preliminary study conducted at Muhammadiyah Senior High School Kediri City in 2022, out of 10 young women interviewed, it was found that they had never received counselling about BSE, one person (10%) understood about BSE, one person (10%) understood the benefits obtained from BSE and 0 people (0%) had or had done BSE. The interview results showed that female students' low awareness of BSE was caused by low knowledge, lack of information about BSE, and lack of understanding of healthy lifestyles. Therefore, if young women get information about BSE by holding counselling, young women can be aware.

BSE and perceived *susceptibility* are combined in treating disease, especially breast cancer. BSE is one way to detect breast cancer early. SADARI plays a role in the discovery of early-stage breast cancer. Cancer statistically, in America and Indonesia, the sufferers themselves find 95% of breast cancer incidence. Therefore, every woman must have health behaviours and extensive knowledge about diseases and preventive measures.

The age of breast cancer patients also changes if, in the past, the average patient was over 50 years old; now, the age of patients is 35-50. This means that many breast cancer patients are at a productive

age. One of the causes of the shift in incidence is an unhealthy lifestyle, such as the wrong diet and not exercising. In addition, overweight or obesity also plays a vital role in the high cases of breast cancer [11].

According to the Health Belief Model concept, several variables are involved in disease prevention measures: *perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy*. The results of Norman and Brain's study on women with a history of breast cancer in the UK stated that *perceived susceptibility, barriers, and self-efficacy* are significant independent predictors of BSE action (Adriani & Sulistyowati, 2016).

Based on the explanation above, this study is essential to determine the Effect of Counseling on BSE (Breast Self-Examination) on the Implementation of BSE and *Perceived Susceptibility* to Early Detection of Breast Cancer in Adolescents at Muhammadiyah Senior High School Kediri City in 2022.

RESEARCH METHOD

This type of research is quantitative research [13]. The research design is *pre-experimental* with a *pre-post test* design in one group (one group pre-post design) conducted on grade XI students of Muhammadiyah Senior High School Kediri City in 2022. The population and sample in this study were all class XI students of Muhammadiyah Senior High School Kediri City, with as many as 37 respondents. The calculation of the research sample size using the sampling technique used is total sampling [14]; that is, 37 respondents were obtained. The study has two variables: the dependent variable (the implementation of BSE and *perceived susceptibility*) and the independent variable (the implementation of BSE). The data collection instruments used were observation sheets and questionnaires. The data analysis used is univariate and bivariate. Bivariate analysis using the *Wilcoxon test*. Ethics in research

means that before the research is conducted, the researcher explains the purpose of this study and provides an *informed consent* sheet to be signed by respondents.

RESULTS AND ANALYSIS

RESULT

Characteristics of Respondents

Table 1.
Distribution of Respondents' Characteristics

Characteristics	Frequency (f)	Percentage (%)
Parent		
Basis	21	56,8
Intermediate	8	21,6
High	8	21,6
Education		
Ever	0	0
Never	28	75,7
Resources		
Book and Mass Media	4	10,8
Parents/ Teach primary friends	5	13,5

The results of the analysis are in Table 1. Most of the respondents' parents' education is primary education, 21 people (56.8%). For information source data, it was found that most respondents in the category, namely 28 respondents (75.7%), had never received an information source.

Table 2.
Frequency Distribution of Respondents Based on the Implementation of BSE Before and After Getting Counseling on BSE

Implementation of SADARI	Pre Intervention		Post Intervention	
	F	%	F	%
Good	0	0	12	32,4
Enough	4	10,8	18	48,6
Less	33	89,2	7	18,9
Total	37	100	37	100

Based on Table 2, it can be interpreted that before counselling on BSE, almost all respondents had less than 33 respondents (89.2%). Meanwhile, after counselling on BSE, some respondents had the implementation of BSE in the medium category, namely 18 respondents (48.6%).

Table 3.
Frequency Distribution of Respondents
Based on *Perceived Susceptibility* Early
Detection of Breast Cancer Before and After
Getting Counseling on BSE

<i>Perceived Susceptibility</i>	Pre		Post	
	Intervention		Intervention	
	F	%	F	%
High	0	0	24	64,9
Intermediate	12	32,5	9	24,3
Low	25	67,5	4	10,8
Total	37	100	37	100

Table 3 shows that before counselling on BSE, almost all respondents had *low perceived susceptibility*, 25 respondents (67.5%). Meanwhile, after counselling on BSE, most respondents had *perceived susceptibility* in the high category, namely 24 respondents (64.9%).

Table 4.
Cross-tabulation of the Effect of Counseling
on BSE (Breast Self-Examination) on the
Implementation of BSE Before and After
Counseling

Before Counseling	After Counseling						Sum	
	Good		Enough		Less			
	f	%	f	%	f	%	f	%
Good	0	0	0	0	0	0	0	0
Enough	0	0	4	10,4	0	0	4	10,8
Less	12	32,4	18	48,6	7	18,9	33	89,2
Sum	12	32,4	22	59	7	18,9	37	100

ρ value = 0,000 α = 0,05 Positive rank = 26 Negative rank = 0 Ties = 11

Table 4 can be interpreted that before counselling was held on BSE, respondents who had exemplary BSE implementation were 0 respondents (0%), who had sufficient SADARI implementation, namely four respondents (10.4%), and those who had less SADARI implementation, namely 33 respondents (89.2%). After counselling, respondents who had exemplary implementation were 12 respondents (32.4%) who had sufficient BSE implementation, namely 18 respondents (48.6%), and those who had less implementation, namely seven respondents (18.9%). Based on the statistical test results using the *Wilcoxon* test with SPSS, p -value = 0.000 < α = 0.05, then H_0 is rejected, and H_1 is accepted. This

means that counselling influences BSE (breast self-examination) on implementing BSE In adolescents at Muhammadiyah Senior High School Kediri City Year 2022. With a *positive* value of rank 26 and *ties* 11, 26 respondents experience changes after counselling, and 11 respondents do not experience changes after counselling about BSE.

Table 5.
Cross-tabulation of the Effect of Counseling
on BSE (Breast Self-Examination) on
***Perceived Susceptibility* to Early Detection of**
Breast Cancer Before and After Counseling

Before Counseling	After Counseling						Sum	
	High		Inter mediat e		Low			
	f	%	f	%	f	%	f	%
High	0	0	0	0	0	0	0	0
Intermediate	12	32,4	5	13,5	1	2,7	18	48,6
Low	12	32,4	4	20,8	3	8,1	19	51,4
Sum	24	64,9	9	24,3	4	10,8	37	100

ρ value = 0,000 α = 0,05 Positive rank = 28 Negative rank = 1 Ties = 8

From Table 5, it can be interpreted that before counselling on BSE, respondents who had high perceived susceptibility amounted to 0 respondents (0%), those who had moderate perceived susceptibility amounted to 18 respondents (48.6%), and those who had low *perceived susceptibility* amounted to 19 respondents (51.4%). After counselling on BSE, respondents with high perceived susceptibility amounted to 24 respondents (64.9%), and respondents with moderate perceived susceptibility were nine (24.3%). Those who had low perceived susceptibility were four respondents (10.8%).

Based on the statistical test results using the *Wilcoxon* test with SPSS, p -value = 0.000 < α = 0.05, then H_0 is rejected, and H_1 is accepted. This means that counselling influences BSE (breast self-examination) on perceived susceptibility to early detection of breast cancer in adolescents at Muhammadiyah Senior High School in Kediri City. With positive values of rank 28, a *negative rank* of 1, and *ties* 8, 28 respondents experienced good changes, one

experienced moderate to low changes in perceived susceptibility, and eight did not experience changes after counselling

DISCUSSION

Based on the results of research and data, it can be interpreted that before the counselling on BSE, almost all respondents had less than 33 respondents (89.2%). After counselling, some respondents had sufficient implementation, namely 18

(48.6%). This research is in line with Sri Utari's study entitled "The Effect of Counseling on Early Detection of Breast Cancer on the Skills and Implementation of BSE in Women of Childbearing Age in Klumplit Hamlet Caturharjo Sleman Yogyakarta in 2015", with the results that there is an influence of counselling on early detection of breast cancer on the implementation of BSE in women of childbearing age in Klumplit Hamlet Caturharjo Sleman Yogyakarta year 2015 with $p\text{-value} = 0.000 < \alpha = 0.05$.

In health counselling, counselling methods foster new behaviours or someone who has begun to be interested in a behaviour change or innovation. The basis for this individual approach is that everyone has different problems or reasons for accepting or adopting the new behaviour. One of the domains of behaviour is knowledge. Knowledge results from the learning process involving the senses of sight, hearing, smell, and taste. Knowledge will reinforce individuals in every decision-making and behaviour [15].

According to Ronger, quoted in [16], Reveals before a person adopts a new behavior in that person, there is a sequential process, namely: awareness, interest, evaluation, trial, and *adoption*. Awareness is the process by which a person is aware in the sense of knowing in advance about a stimulus (object). Interest is where people begin to be interested in the stimulus. Evaluation is a process in which a person weighs whether or not the stimulus is good for him—a trial where someone has tried a new behaviour. Adoption is the process by

which the subject behaves uniquely according to his knowledge, awareness, and attitude toward the stimulus.

The more often someone gets information, the better their knowledge will be; this knowledge will cause a positive reaction in acting. Counselling is the simplest medium for conveying information. Health counselling will positively influence adolescents to take action, in this case, to carry out BSE regularly and independently.

Based on the results of statistical tests also show that there is an influence of counseling about BSE (breast self-examination on *perceived susceptibility* and early detection of breast cancer in adolescents at Muhammadiyah Senior High School In Kediri City. This research is in line with research conducted by Siska Fernanda entitled "Factors Associated with Early Detection of Breast Cancer through Breast Self-Examination by Line A Students of the Public Health Study Program, Faculty of Medical Sciences, UNAND Padang in 2011" with the results of *perceived susceptibility* is one of the supporting factors for SADARI.

Perceived vulnerability is considered a given health condition depending on a person's knowledge of the health problem. Health confidence models predict that the higher the perceived threat, the higher the likelihood of involvement in promoting health behaviours [17].

Personal risk or vulnerability is one of the stronger perceptions in encouraging people to adopt healthy behaviours. The greater the perceived risk, the more likely it is to engage in behaviours to reduce risk. So naturally, when people believe they are at risk of disease, they will do something to prevent it. Conversely, unhealthy behaviors may occur when people think they're not at risk or have a low-risk [18].

BSE and *perceived susceptibility* are a combination in disease management, especially in breast cancer. BSE is one way to detect breast cancer early. Therefore, every woman must have health behaviors

and extensive knowledge about diseases and preventive measures. According to the Health Belief Model Field (19) concept, BSE and *perceived susceptibility* are a combination in disease management, especially in breast cancer. BSE is one way to detect breast cancer early. Therefore, every woman is expected to have health behaviors and extensive knowledge about diseases and preventive measures, according to the *Health Belief Model* [19].

Counseling on BSE and perceived susceptibility is a combination in treating a disease, especially breast cancer. Perceived susceptibility is a more robust perception of hostility in encouraging someone to adopt healthy behaviors. At the same time, BSE is one way to detect breast cancer early. The more often a person gets information, the higher their perception that a woman is susceptible to breast cancer, and they are more involved in behaviors to reduce risk or prevent it.

CONCLUSION

The results showed the influence of Counseling on BSE (Breast Self-Examination) on the implementation of awareness and *perceived susceptibility* to early detection of breast cancer in adolescents.

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