

FACTORS INFLUENCING BREAST CANCER EARLY DETECTION BEHAVIOR USING BREAST SELF-EXAMINATION

Yuliani Lestari^{1*}, Pradiva Dwi Lestari², H. Hazairin Efendi³

¹D IV Midwifery Study Program, Faculty of Midwifery and Nursing, Universitas Kader Bangsa Palembang

^{2,3}Faculty of Midwifery and Nursing, Universitas Kader Bangsa Palembang

*Correspondence email: yulianilestari12345@gmail.com

ABSTRAK : FAKTOR-FAKTOR YANG MEMPENGARUHI PERILAKU DETEKSI DINI KANKER PAYUDARA TERHADAP PERILAKU SADARI

Latar Belakang: Kanker merupakan salah satu masalah di negara maju maupun berkembang. Kanker sangat berbahaya karena menyebabkan kematian bagi penderitanya. Menurut Organisasi Kesehatan Dunia (WHO), 11,6% wanita akan mengalami kanker payudara. Kanker payudara menempati posisi kedua, setelah kanker serviks, yang menyerang wanita di seluruh dunia. Berdasarkan hasil survei yang dilakukan oleh Balitbangkes pada tahun 2019, kanker menempati urutan kelima penyebab kematian di Indonesia.

Tujuan Penelitian: untuk mengetahui hubungan pengetahuan, sikap, dan KIE (Information, Education, and Communication) terhadap perilaku SADARI (SADARI) di MTS Nahdhotul Muslimin Kecamatan Sinar Peninjauan Kabupaten OKU Tahun 2021.

Metode: Desain penelitian kuantitatif dengan metode survei analitik menggunakan pendekatan cross-sectional digunakan dalam penelitian ini. Populasi penelitian ini adalah 134 siswi MTS Nahdhotul Muslimin Desa Karya Mukti Kecamatan Sinar Peninjauan Kabupaten OKU pada bulan Agustus 2021. Sampel penelitian ini sebanyak 67 responden yang diperoleh dengan menggunakan teknik random sampling.

Hasil: Hasil uji chi-square pada variabel pengetahuan diperoleh p-value 0,000 ($< = 0,05$) pada variabel sikap diperoleh p-value 0,000 ($< = 0,05$) dan pada variabel IEC diperoleh p-value 0,027 ($< = 0,05$) artinya ada hubungan yang signifikan antara pengetahuan, sikap dan KIE (Information, Education, and Communication) terhadap perilaku SADARI di MTS Nahdhotul Muslimin Kecamatan Sinar Peninjauan, Kabupaten OKU pada tahun 2021.

Saran: UPTD Puskesmas Karya Mukti untuk mendirikan pusat penyuluhan dan penyuluhan kesehatan di sekolah agar mudah dijangkau oleh siswa, dan mengadakan penyuluhan kesehatan tentang pemeriksaan payudara sendiri di sekolah.

Kata kunci: KIE, pengetahuan, sikap, perilaku pemeriksaan payudara sendiri

ABSTRACT

Background: Cancer is one of the problems in both developed and developing countries. Cancer is very dangerous because it causes death for the sufferer. According to the World Health Organization (WHO), 11.6% of women will experience breast cancer. Breast cancer is in the second position, after cervical cancer, which affects women worldwide. Based on the results of a survey conducted by Balitbangkes in 2019, cancer is the fifth leading cause of death in Indonesia.

Research Aim: to determine the relationship between knowledge, attitude, and IEC (Information, Education, and Communication) on BSE (Breast Self – Examination) behavior at MTS Nahdhotul Muslimin, Sinar Peninjauan District, OKU Regency in 2021.

Methods: Quantitative research design with an analytical survey method using a cross-sectional approach was used in this study. The population were 134 female students of MTS Nahdhotul Muslimin in Karya Mukti Village, Sinar Peninjauan District, OKU Regency in August 2021. The sample of this study was 67 respondents obtained by using a random sampling technique.

Results: The results of the chi-square test on the knowledge variable obtained the p-value of 0.000 ($< \alpha = 0.05$) on the attitude variable obtained the p-value of 0.000 ($< \alpha = 0.05$) and on the IEC variable obtained the p-value 0.027 ($< \alpha = 0.05$) meaning that there is a significant relationship between knowledge, attitude and IEC (Information, Education, and Communication) on BSE (Breast Self-Examination) behavior at MTS Nahdhotul Muslimin, Sinar Peninjauan District, OKU Regency in 2021.

Suggestion: It is recommended that the UPTD of Karya Mukti public health center establish a health information and counseling center in schools so that it is easily accessible to the students, and conduct health counseling about breast self-examination in schools.

Keywords: IEC, knowledge, attitude, breast self-examination behavior

INTRODUCTION

Cancer is a problem in both developed and developing countries. Cancer is a disease of cell development that is not limited to the organ where it grows but can spread to other organs in the body. Breast cancer is a breast disorder most feared by women because it cannot be cured if it is found at an advanced stage (Widiastuti, et al, 2018).

According to the World Health Organization (WHO), the number of women with breast cancer has reached 2,098 million people, 700,000 of whom live on the Asian continent, including Indonesia. The International Cancer Research in Lyon France also noted that more than one million cases occur worldwide each year, and the majority affect elderly women (Puspita, 2019).

Based on the data from the Indonesian Ministry of Health taken from the Hospital Information System in 2018, breast cancer ranks second in inpatients throughout Indonesia (16.85%) after cervical cancer (11.78%). In 2019, there was an increase in the prevalence of cancer in Indonesia, which amounted to 1.49‰. The prevalence of cancer in Yogyakarta Province is high compared to other provinces, which is 4.86‰ at Riskesdas in 2018 (Kemenkes, 2019).

Breast cancer patients in South Sumatra who are registered at the Cancer Information and Support Center (CISC) were 300 people. CISC is a cancer care community located in South Sumatra. Herman Deru, the governor of South Sumatra Province, calls for the BSE movement for women from an early age and health education about cancer and other diseases given quarterly in schools (Dinkes Sumsel, 2019).

Based on the data from OKU District Health Office in 2021, the incidence of breast cancer in Baturaja City is still unknown because there has been no population-based breast cancer registration implemented (Dinkes OKU, 2021).

The incidence of breast cancer increases along with age. The age of women who are more often affected by breast cancer is above 55-65 years, called the "cancer age group". However, young age also has the probability to have breast cancer (Puspita, 2019).

The exact cause of breast cancer is still unknown. Several factors influencing the

occurrence of breast cancer are a history of breast cancer in family members (mother, brother, or sister), women who experience early menarche, late menopause, and an unhealthy lifestyle. Several factors leading to breast cancer include women who do not breastfeed, use oral contraceptives, do hormone replacement therapy, and exposure to radiation (Sutrisni et al., 2020).

Breast cancer usually has no early symptoms when it is small and can be treated. Therefore, women need to follow the recommended guidelines to detect breast cancer early, before the symptoms develop. When breast cancer has grown to a larger size and can be felt, the most visible physical sign is the appearance of a painful mass. The other signs include breast tenderness, thickening, swelling, skin irritation or distortion, and breast nipple abnormalities (Oktaviana, 2018).

There are various ways to detect breast cancer in adolescents, namely thermography, mammography, ductography, biopsy, and breast ultrasound. In addition, there is also an easier and more efficient way to detect abnormalities in the breast called breast self-examination (BSE). BSE is a simple examination to find lumps and abnormalities in the breast conducted by oneself. BSE is a method of routine and systematic breast examination used as an effort to screen for breast cancer to detect breast cancer as early as possible. This method is very effective and efficient because doing BSE regularly can reduce the mortality rate by 25-30% (Nisman, 2018).

Every woman needs to do early detection of breast cancer. So far, the recommended early detection is breast self-examination (BSE) since the age of 20 years and mammography examination once or twice at the age of 35 years to 49 years. The method of mammography examination is successful if the breast cancer has indeed occurred of a certain size. However, many women do not know what the benefits of mammography are for themselves. (Suara and Septiani, 2019)

Based on the results of the preliminary survey on March 9, 2021 conducted on the students of MTS Nahdhotul Muslimin, Sinar Peninjauan District, many students have not carried out BSE to detect breast cancer as early as possible. The researchers conducted interviews with seven

students by asking several questions such as what BSE is, what the benefits of BSE are, and when BSE is carried out. The results of the preliminary survey also showed that four students had no idea about BSE. Therefore, based on the explanation and description above, the researchers are interested in conducting a study entitled "factors influencing breast cancer early detection behavior using breast self-examination in the students of MTS Nahdhotul Muslimin in Sinar Peninjauan District, OKU Regency in 2021"

RESEARCH METHODS

A quantitative research design with an analytical survey method using a cross-sectional approach was used in this study. The population in this study were 134 female students of MTS Nahdhotul Muslimin in Karya Mukti Village, Sinar Peninjauan District, OKU Regency in August 2021. The sample of this study was 67 respondents obtained using a random sampling technique. The primary data were obtained through interviews and questionnaires to female students in 7th – 9th grades at MTS Nahdhotul Muslimin in August 2021. The independent variables in this study included knowledge, attitudes, and IEC, and the dependent variable was BSE behavior. Then, the secondary data were obtained from records using a checklist. Univariate analysis was carried out to obtain an overview of the frequency distribution and percentages of all research variables including knowledge, attitudes, IEC (independent variables), and breast cancer early detection behavior using BSE (dependent variable). Later, bivariate analysis using the chi-square test was also conducted.

RESEARCH RESULTS

Univariate Analysis

Table 1
Frequency Distribution of BSE Behavior at MTS Nahdhotul Muslimin, Sinar Peninjauan District, OKU Regency in 2021

BSE Behavior	Frequency (n)	Percentage (%)
Yes	15	22,4
No	52	77,6

Table 1 above shows that of the 67 respondents, 15 respondents (22.4%) carried out

BSE, and 52 respondents (77.6%) did not carry out BSE.

Table 2
Frequency Distribution of Respondents' Knowledge at MTS Nahdhotul Muslimin, Sinar Peninjauan District, OKU Regency in 2021

Knowledge	Frequency (n)	Percentage (%)
Good	17	25,4
Poor	50	74,6

Table 2 above shows that of the 67 respondents, 17 respondents (25.4%) had good knowledge about BSE, and 50 respondents (74.6%) had poor knowledge about BSE.

Table 3
Frequency Distribution of Respondents' Attitudes at MTS Nahdhotul Muslimin, Sinar Peninjauan District, OKU Regency in 2021

Attitude	Frequency (n)	Percentage (%)
Good	16	23,9
Poor	51	76,1

Table 3 above shows that of the 67 respondents, 16 respondents (23.9%) had a good attitude toward BSE, and 51 respondents (76.1%) had a poor attitude towards BSE.

Table 4
Frequency Distribution of IEC at MTS Nahdhotul Muslimin, Sinar Peninjauan District, OKU Regency in 2021

IEC	Frequency (n)	Percentage (%)
Yes	47	70,1
No	20	29,9

Table 4 above shows that of the 67 respondents, 47 respondents (70.1%) had received IEC, and 20 respondents (29.9%) had not received IEC.

Bivariate Analysis

Table 5 above shows that of the 17 respondents who had good knowledge, 12 respondents (70.5%) carried out BSE behavior, and 5 respondents (29.4%) did not carry out BSE behavior.

Table 5
Relationship between Knowledge and BSE Behavior at MTS Nahdhotul Muslimin, Sinar Peninjau District, OKU Regency in 2021

Knowledge	BSE Behavior				Total	Sig	OR
	Yes	%	No	%			
Good	12	70,5	5	29,5	17	0,000	17,8
Poor	3	6	47	94	50		

Table 6
Relationship between Attitude and BSE Behavior at MTS Nahdhotul Muslimin, Sinar Peninjau District, OKU Regency in 2021

Attitude	BSE Behavior				Total	Sig	OR
	Yes	%	No	%			
Good	13	81,2	3	18,8	16	0,000	16,167
Poor	2	3,9	49	96,1	51		

Table 6 above shows that of 16 respondents who had a good attitude towards BSE, 13 respondents (81.2%) carried out BSE behavior, and

3 respondents (18.8%) did not carry out BSE behavior.

Table 7
Relationship between IEC and BSE Behavior at MTS Nahdhotul Muslimin, Sinar Peninjau District, OKU Regency in 2021

IEC	BSE Behavior				Total	Sig	OR
	Yes	%	No	%			
Yes	1	5	19	95	20	0,027	8,06
No	14	29,8	33	70,2	47		

Table 7 above shows that of the 20 respondents who received IEC, a respondent (5%) carried out BSE behavior, while 19 respondents (95%) did not carry out BSE behavior.

DISCUSSION

The results of the chi-square test showed that there was a significant relationship between knowledge and BSE behavior with the p-value of 0.000 ($p\text{-value} \leq 0.05$) and the OR value of 17.8.

This study is in line with a study conducted by Widiastuti et al. (2018) showing that there was a significant relationship between the level of knowledge about BSE and BSE behavior with the p-value of 0.023, and BSE behavior as breast cancer early detection was carried out by the female students of DIV Midwifery Program, Faculty of Medicine UNS because they had received information or knowledge about breast cancer and BSE.

This study is also in line with a study conducted by Utami (2018) entitled the relationship between the level of knowledge and BSE behavior

in students of the Faculty of Midwifery, Padjadjaran University, stating that knowledge affected BSE behavior, with the p-value of 0.026. Several factors influence knowledge in a person including education, experience, and age. The respondents who had good knowledge showed that they had awareness of the importance of BSE from an early age. This is due to the educational background of the respondents, who are midwifery students who have received information or knowledge about breast cancer and BSE.

A study conducted by Widiastuti et al. (2018) showed that there was a significant relationship between the level of knowledge about BSE and BSE behavior with the p-value of 0.021 and OR value of 0.057, meaning that knowledge has an influence on BSE behavior, and the respondents had knowledge as early detection of breast cancer because they had received information or knowledge about breast cancer and BSE before.

Based on the results of this present study, the respondents who had good knowledge did not all perform BSE behavior. The results of the

interviews showed that some of the respondents felt uncomfortable when carrying out BSE behavior so they did not conduct it routinely every month. Meanwhile, the respondents with poor knowledge about BSE carried out BSE because of the influence of the behavior of the people around them who carry out BSE behavior. Knowledge is a very important domain for the formation of one's actions. Behavior-based knowledge will be more lasting than behavior that is not based on knowledge (Notoatmodjo, 2014).

The results of the chi-square statistical test showed that there was a significant relationship between attitude and BSE behavior with the p -value of 0.000 and the OR value of 16.167. It is said that there is a relationship because of the p -value \leq 0.05.

The results of this study are in line with a study conducted by Handayani (2017) showing that there was a significant relationship between attitude and BSE behavior in which positive attitudes influenced BSE behavior, with the p -value of 0.001 and OR value of 11.761. Then, a study conducted by Septiani (2018) on high school female students showed that the majority of respondents (82.7%) had a positive attitude towards BSE but had negative BSE practices and statistical results showed the p -value \leq 0.05 which means that there is a significant relationship between attitudes and BSE practices.

The results of a study conducted by Oktaviana (2018) also showed that the majority of respondents, 104 respondents (71%), had a positive attitude towards BSE but had negative BSE practices and statistical results showed the p -value \leq 0.05 which means that there is a significant relationship between attitudes and BSE practices. The study used a descriptive-analytic method with a cross-sectional approach with a sample of 195 people using a simple random sampling technique.

Attitude is the most important concept in social psychology that discusses the elements of attitude both as individuals and in groups. Many studies have been conducted to formulate the notion of attitude and change. Attitude is a person's response to a certain stimulation or object, which already involves the relevant opinion and emotional factors (happy-not happy, agree-disagree, good-bad, and so on) (Notoatmodjo, 2018).

Attitude is a mental or emotional readiness for some kind of appropriate action. In this study, it more emphasizes on the mental or emotional readiness of female students to carry out BSE to prevent breast cancer (Djaali, 2018).

Breast cancer causes cells and breast tissue to change shape, become abnormal and multiply uncontrollably (Nugroho, 2016). Women often carry out BSE because the accessibility of information about BSE is easy to get, and women do not carry out BSE because it is difficult to access information about BSE (Fesbaein, 2015).

The results of the chi-square test showed that there was a significant relationship between IEC and BSE behavior with the p -value of 0.027 and the OR value of 8.06. It is said that there is a relationship because of the p -value \leq 0.05.

This present study is in line with a study conducted by Khofana (2018) showing that IEC counseling obtained the p -value = 0.000 (p -value \leq 0.05), meaning that there is a relationship between IEC and breast self-examination to prevent breast cancer. In the study, 26 respondents (86.7%) had received IEC counseling and 4 respondents (13.3%) had never received IEC. The study also suggested that adolescents should always carry out breast self-examination (BSE) regularly as a form of breast cancer early detection. Then, a study conducted by Septiani (2018) also showed that the majority of the respondents (82.7%) had received IEC with the p -value of 0.008, which means that there is a relationship between IEC and BSE behavior.

Later, a study conducted by Sulistina (2018) showed that there was a significant difference between respondents who had received IEC and BSE behavior, as many as 17 female students (56.7%). The Mann Whitney U Test obtained a calculation result of -3.713 with the p -value = 0.000 (p -value \leq 0.05) which means that there is a relationship between IEC and BSE behavior.

Communication is the exchange of thoughts or information to create a sense of mutual understanding and mutual trust for the realization of a good relationship between one person and another. Health communication is a systematic effort to positively influence public health behavior, using various principles and methods of communication, both interpersonal communication and mass communication. Information is an announcement/message given to someone or the media to others according to their cultural needs (Wardah, 2017).

Information is explanations, ideas, and facts that need to be known by the public. Education is a series of activities carried out systematically, planned, and directed with active participation from individuals to groups and communities to solve social, economic, and cultural community problems (Wardah, 2017).

Health education is one of the competencies required of health workers because it is one of the roles that must be carried out in providing health services for individuals, families, groups, or communities. Communication, Information, and Education (IEC) is a process of delivering messages, and information provided to the communities about breast cancer prevention using the BSE method through media such as radio, television, press, films, publishing, promotional activities, and exhibitions with the main objective to increase the awareness of the importance of BSE to prevent breast cancer. To run effectively, the topic of Communication, Information, and Education (IEC) should be based on the needs and conditions. Given that the scope of the delivery of Communication, Information and Education (IEC) is behavior with various variables, so then this Communication, Information, and Education (IEC) also uses principles and methods from various disciplines such as communication, medical anthropology, social psychology, and social marketing.

From the results of those previous studies, not all respondents who have received information and education about BSE behave well and apply the information and knowledge obtained by carrying out BSE (Breast Self-Examination). Some respondents who have received IEC do not carry out BSE because they feel that they are healthy and do not have breast cancer, so they do not need to carry out BSE. Whilst, in this study, the respondents who often carry out BSE are the respondents who have received IEC because they understand the dangers of breast cancer which can cause death, while the respondents who have never received BSE do not carry out BSE because they do not know the benefits of BSE and the dangers of breast cancer. Some respondents have never carried out BSE even though they have received information about BSE.

CONCLUSION

There is a significant relationship between knowledge, attitude, and IEC (Information, Education, and Communication) on BSE (Breast Self-Examination) behavior at MTS Nahdhotul Muslimin, Sinar Peninjauan District, OKU Regency in 2021

SUGGESTION

It is recommended to establish health information and counseling centers in schools so that the students can easily access health information, especially about BSE and breast

cancer prevention, and to disseminate information about the benefits of BSE by distributing leaflets and spreading posters in public places.

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