Indonesian Journal of Global Health Research
Volume 6 Number 2, April 2024
e-ISSN 2715-1972; p-ISSN 2714-9749
http://jurnal.globalhealthsciencegroup.com/index.php/IJGHR

THE RELATIONSHIP OF KNOWLEDGE, ATTITUDES, AND FAMILY HISTORY OF BREAST CANCER TO BREASR SELFT EXAMINATION (BSE) BEHAVIOR ON WOMEN

Ayu Yeli Meilina*, Masluroh
Bachelor of Midwifery, STIKES Abdi Nusantara, Jl. Swadaya No.7, Jatibening, Pd. Gede, Bekasi, West Java 17412, Indonesia
*ayuyeli310@gmail.com

ABSTRACT
Breast cancer is the most common cancer experienced by women with an estimated 1.67 million new cancer cases diagnosed. The World Cancer Organization and the World Health Organization estimate an increase in cancer incidence by 2030, and the majority occur in developing countries including Indonesia. Breast self-examination (BSE) is an easy way to detect lumps as early cancer. But there are still many women who don't do it. The aimed of this study was to conduct an analysis of the effect of knowledge about the benefits of BSE, attitudes, and history of cancer in families with BSE examination. Cross-sectional design study. The study was conducted at the Pabuaran Health Center (Puskesmas) from December 2023 to January 2024. The sample used in this study was 43 women of childbearing age. The independent variables in this study were: knowledge, attitude, and history of breast cancer. The dependent variable is the behavior of the BSE examination. The research instrument is a questionnaire. The bivariate analysis used in this study was a multiple logistic regression test. Multivariate results showed a relationship between knowledge and attitudes towards BSE behavior (knowledge p value 0.019 < 0.05. attitude p value 0.031 < 0.05), but there was no relationship between family breast cancer history and BSE behavior p value 0.560 < 0.05.

Keywords: attitude; BSE; history of breast cancer; knowledge

First Received	Revised	Accepted
19 January 2024	28 January 2024	31 January 2024
Final Proof Received		**Published**
28 February 2024		01 April 2024

How to cite (in APA style)
Meilina, A. Y., & Masluroh, M. (2024). The Relationship of Knowledge, Attitudes, and Family History of Breast Cancer to Breasr Self Examination (BSE) Behavior on Women. Indonesian Journal of Global Health Research, 6(2), 539-546. https://doi.org/10.37287/ijghr.v6i2.2775.

INTRODUCTION

Breast cancer is the second most common cancer in the world and is the most frequent cancer among women with an estimated 1.67 million new cancer cases diagnosed (25% of all cancers). Breast cancer cases are more prevalent in developing areas (883,000 cases) compared to more developed areas (794,000 cases). Level Incidence Rate (IR) varies nearly fourfold across regions of the world. (Marfianti, 2021) Based on Globocan's estimation, International Agency for Research on Cancer (IARC), the incidence of cancer in women in Indonesia is 134 per 100,000 population with the highest incidence in women is breast cancer at 40 per 100,000 women. While the mortality rate in Indonesia for breast cancer is 16.6 deaths per 100,000 population. Meanwhile, based on Hospital Information System (SIRS) data, breast cancer hospitalization cases showed 12,014 cases (28.7%), cervical cancer 5,349 cases (12.8%). In Indonesia, breast cancer ranks second in the highest cancer prevalence at 0.5% The threat of cancer in Indonesia is increasing along with changes in people's lifestyles. The World Cancer Organization and the World Health Organization estimate a 300 percent increase in the incidence of cancer in the world by 2030, and the majority occur in developing countries including Indonesia.(Fatimah, 2018).

The management of breast cancer malignancy has progressed very rapidly, even so the mortality rate and malignancy rate of breast cancer still remain high (Hero, 2021). Based on the Oncology Association in Indonesia, the prognosis of breast cancer based on its stage diagnosis includes: stage 1 (85%); stage II (60-70%); stage III (30-50%); and stage IV (15%). However, in developing countries, patients usually check themselves into health services already in an advanced state (stage III-IV), compared to developed countries patients come in the early stages (stage I-II).(Lestari, 2019 The incidence of delayed self-examination of breast cancer to health services in Indonesia reaches more than 80% so that it is found at an advanced stage, which can worsen the prognosis of sufferers. When viewed Case Fatality Rate Breast cancer cases found in the early stages are only 7.2%. Therefore, early detection and diagnosis of malignancy plays an important role in improving prognosis in addition to other clinical factors. Early detection methods that are easy, cheap and can be done alone are breast self-examination (SADARI).(Ferlay J, 2020) (Lestari, 2019)

Breast self-examination (BSE) is a breast self-examination to be able to find abnormal lumps. This examination can be done alone without having to go to a health worker and without having to spend money. American Cancer Society in the breast cancer screening project recommends BSE even though there are no complaints found. By doing early detection can reduce mortality by 25-30%.(Irawan, 2018). This easy BSE examination is still not routinely carried out by women of productive age in Indonesia. Previous research reported that the average prevalence of women of productive age is only around 30%. Various factors can influence a person's behavior in doing BSE including knowledge, attitudes, and a history of cancer that has been experienced by family members.(Sarina, 2020) Research conducted by reports that knowledge and attitudes have a significant influence on a woman's actions to do self-awareness, because Knowledge is a domain factor that influences a person's behavior. People who have good knowledge tend to show good behavior as well. Conversely, people who have less knowledge have a tendency to show less behavior. A person will behave according to the knowledge he has. Knowledge is something that is very important to have in the practice of BSE. If someone has a good knowledge of BSE, it would also be good to do BSE, which is done regularly every month.(Purba, 2018) (Purba, 2018)

In addition, attitude is also able to influence Attitude is the readiness to react to an object in the environment as an appreciation of the object. Respondents can realize or not realize depending on the stimulus they receive. If the stimulus received supports then the respondent will realize but if the stimulus received does not support then the respondent will not do BSE. Based on preliminary studies in the Pabuaran Health Center area from January to November there were 4 cases of breast cancer where 1 patient had died, besides that the incidence of FAM (fibri adenoma mammae) cases that were detected was also quite a lot, namely 10 cases with fairly close monitoring because 3 cases had undergone surgery at the referral hospital and were waiting for the results of anatomical pathology to check for malignancy, The high incidence of cancer and FAM in the Pabuaran Health Center area is still not balanced with awareness of taking preventive measures such as breast self-examination (SADARI) and not even knowing how to do BSE properly. The aimed of this study was to conduct an analysis of the effect of knowledge about the benefits of BSE, attitudes, and history of cancer in families with BSE examination in women of childbearing age (WUS) in 2023.

METHOD

This research is a type of research with a cross sectional design. The location used for this study is at the Puskesmas Pabuaran, Serang Regency, Banten Province from December 2023 to January 2024. In this study, the population used a limited population, namely all women of childbearing age who visited the Pabuaran Health Center during the study period. The sample used in this study, using purposive sampling with the number of samples was 43 respondents. The inclusion criteria of the study were: women of childbearing age between the ages of 14-49 years. Come in full awareness or composmentis. Willing to be a respondent by signing informed consent. Exclusion Criteria: Women of childbearing age who come in a somnolene state of consciousness. Women of childbearing age who come in an emergency. Not willing to be a research respondent. The independent variables in this study were: knowledge, attitude, and history of breast cancer. The dependent variable is the behavior of the BSE examination. Research instruments are questionnaires that contain questions to measure knowledge and statements to measure attitudes. All questions have been tested for validity and reliability. The bivariate analysis used in this study was a multiple logistic regression test

RESULTS

Table 1.
Number and Percentage of Awareness Checks by Respondents

AWARENESS CHECK	f	%
Not Doing	17	39.5
Do	26	60.5

Table 1, we can know that the majority of respondents have done BSE actions, namely 26 people (60.5%), although this result is not much different from the number of respondents who have never done BSE, which is 17 people (39.5%).

Table 2.
Number and Percentage of Respondents' Knowledge Level

Knowledge Categories	f	%
High Knowledge	29	67.4
Lack of Knowledge	14	32.6

Table 2 we can know that most respondents have a fairly high knowledge about BSE and *ca mamae* , which is as many as 29 people (67.4%), although there are still respondents who do not have the right knowledge or the level of knowledge is still categorized as less as many as 14 people (32.6%).

Table 3.
Number and Percentage of Respondents' Attitudes Towards BSE Examination

Attitude Categories	f	%
Negative / unsupportive attitude	14	32.6
Positive/supportive attitude	29	67.4

Table 3, we can see that the majority of respondents have had a positive attitude or felt the need to do a BSE examination at least once, namely as many as 29 people (67.4%), although there were still respondents who did not feel that BSE was important or had a negative attitude as many as 14 people (32.6%).

Table 4.
Number and Percentage of Respondents who have a family history of breast cancer

Family history of breast cancer	f	%
No History	25	58.1
Have a History	18	41.9

Table 4 we can know that the majority of respondents do not have family members who suffer from cancer, especially breast cancer or are classified as having no family history of breast

cancer, which is as many as 25 people (58.1%), although it turns out that there are respondents who have a history of breast cancer in their family which is as many as 18 people (41.9%).

Table 5.
Cross-Tabulation of Knowledge with Conscious Behavior

Conscious Behavior	Knowledge Categories				Total	
	Low Knowledge		High Knowledge			
	f	%	f	%	N	%
Not doing BSE	10	23.3	7	16.2	17	39.5
Doing BSE	4	9.3	22	51.2	26	60.5
Total	14	32.6	29	67.4	43	100

Table 5, it can be seen that the number of respondents who have high knowledge and do BSE is 3 times greater than those who have high knowledge but are not aware of it, namely 22 people (51.2%) compared to 7 people (16.2%). Meanwhile, respondents who have a low level of knowledge are more likely not to do BSE, namely 10 people (23.3%).

Table 6.
Cross-Tabulation of Attitudes with Conscious Behavior

Conscious Behavior	Attitude Categories				Total	
	Negative attitude		Positive attitude			
	f	%	f	%	N	%
Not doing BSE	10	23.3	7	16.2	17	39.5
Doing BSE	4	9.3	22	51.2	26	60.5
Total	14	32.6	29	67.4	43	100

Table 6, it can be seen that the number of respondents who have a positive attitude and do BSE is 3 times greater than those who have a positive attitude but do not realize it, namely 22 people (51.2%) compared to 7 people (16.2%). While in respondents who have a negative attitude, the majority do not do BSE, namely 10 people (23.3%).

Table 7.
Cross-Tabulation of Family Breast Cancer History with Conscious Behavior

Conscious Behavior	Family History of Breast Cancer				Total	
	It doesn't have		Have			
	f	%	f	%	N	%
Not doing BSE	13	30.2	4	9.3	17	39.5
Doing BSE	12	27.9	14	32.6	26	60.5
Total	25	58.1	18	41.9	43	100

Table 7, it can be seen that the majority of respondents have no history of breast cancer in their family, namely 28 people (58.1%). The number of respondents who had a history of cancer and did BSE was almost the same as respondents who did BSE even though they did not have a history of breast cancer in their families, namely 14 people (32.6%) compared to 12 people (27.9%). While in respondents who did not have a history of breast cancer in their families, the majority did not do BSE, namely 13 people (30.2%) out of 14 people.

Based on the multivariate results of the relationship between knowledge and self-awareness behavior shows that there is a significant relationship between self-knowledge and behavior, the results of p value 0.019 < 0.05, where the OR value of 2.13 indicates that respondents who have high knowledge are 2 times more likely to do BSE than respondents who have poor knowledge. The relationship between BSE attitude and behavior shows that there is a significant relationship between respondents' attitudes and BSE behavior, p value results 0.031 < 0.05, where an OR value of 2.31 indicates that respondents who have a positive attitude are 2 times more likely to do BSE than respondents who have a negative attitude.

The relationship between family breast cancer history and BSE behavior showed no significant relationship between respondents' attitudes and BSE behavior, p *value* results 0.560 < 0.05.

Table 8.
Multiple logistic regression test

Category	Odds Ratio (OR)	95% Confident interval		P value
		Lower Limit	Upper Limit	
Awareness and Conscious Actions	2.13	1.42	50.15	0.019
Attitudes and Actions of Awareness	2.31	1.24	82.09	0.031
Cancer History and Awareness Action	0.63	0.06	4.40	0.560

DISCUSSION

The relationship between knowledge and breast self-examination behavior (BSE)

The number of respondents who have high knowledge and do BSE is 3 times greater than those who have high knowledge but are not aware of it, namely 22 people (51.2%) compared to 7 people (16.2%). Meanwhile, respondents who have a low level of knowledge are more likely not to do BSE, namely 10 people (23.3%). Based on the results of multiple logistic regression analysis of the relationship between knowledge and BSE behavior shows that there is a significant relationship between SADARI knowledge and behavior, the results of p value 0.019 < 0.05, where the OR value of 2.13 indicates that respondents who have high knowledge are 2 times more likely to do BSE than respondents who have bad knowledge. This result is in line with research conducted by (Arafat, 2018) which reported that one aspect that affects BSE behavior is the aspect of lack of knowledge about breast cancer due to limited information obtained (p = 0.000).

Knowledge can make women of childbearing age understand more about the importance of doing breast self-examination as an effort to find out whether there are lumps that can develop into cancer in the breast. Other things that can affect are environmental factors, there is still a lack of information received by women of childbearing age both from health workers and limited information about BSE. Breast self-examination is very important for fertile women to do (Wea, 2022). Knowledge is the result of knowing which means remembering something that has been learned or received before (Mathew, 2021). Knowledge can be received through sensing an object. Sensing involves the five senses possessed by humans, namely the senses of sight, hearing, taste and touch. Most of the knowledge is obtained from the eyes and ears. Knowledge plays a very important role in shaping a person's behavior (Koc, 2019). Health education is an educational concept applied in the health sector or an activity that can help individuals, groups, communities in improving abilities or behaviors in an effort to achieve optimal health (Suryawati, 2022).(Maulidia, 2022)(Kurniawati, 2021) So it is very necessary to increase knowledge by organizing health education because by conducting health education about BSE, the individual's views change so that actions arise to carry out BSE (Lombu, 2023).

Relationship between Attitude and Breast Self-Examination Behavior (BSE)

Based on the cross-tabulation table, it can be seen that the number of respondents who have a positive attitude and do BSE is 3 times greater than those who have a positive attitude but do not realize it, namely 22 people (51.2%) compared to 7 people (16.2%). While in respondents who have a negative attitude, the majority do not do BSE, namely 10 people (23.3%). Multiple logistic regression analysis of the relationship between BSE attitudes and behaviors shows a significant relationship between respondents' attitudes and BSE behaviors, p value results 0.031 < 0.05, where OR values of 2.31 indicate that respondents who have a positive

attitude are 2 times more likely to do BSE than respondents who have a negative attitude. This result is in line with research conducted by (Hardiyanti, 2018) which reported that the MANOVA hypothesis test obtained a value of p = 0.000, the results showed there was an influence between attitudes and breast self-examination practices.

Other studies say that the good attitude that respondents have means that respondents believe self-awareness is important, useful and can improve their health. A good attitude is directly proportional to good knowledge, in line with previous research which states that the better the knowledge about BSE, the better the attitude towards SADARI (Puspitasari, 2019). Attitude is a reaction or response that is still closed from a person to a stimulus or object (Fondjo, 2018). Newcomb, one of the social psychologists, states that attitude is a readiness or willingness to act, and not an exercise of a particular motive. Attitude is not yet an action or activity, but is a predisposition to action (behavior). It is still a closed reaction, not an open reaction or open behavior. Attitude is the readiness to react to objects in a certain environment as an appreciation of objects (Puspitasari, 2019).(Juwita, 2018)

Attitudes can arise as a result of receiving experiences and information from others around us is one of the social components that influence our attitudes (Heena, 2019). Among the people who are usually considered important to individuals are parents, people of higher social status, peers, close friends, teachers, co-workers, wives or husbands and mass media as a means of communication. Various forms of mass media such as television, radio, newspapers, magazines etc., have a great influence in the formation of people's opinions and beliefs. Delivery of information as its main task. The existence of new information about something provides a new cognitive foundation for the formation of attitudes towards it (Lombu, 2023).(Mardiana, 2021)

Relationship between family history of breast cancer and breast self-examination behavior (BSE)

Based on the results of cross-tabulation, it can be seen that the majority of respondents have no history of breast cancer in their family, namely 28 people (58.1%). The number of respondents who had a history of cancer and did BSE was almost the same as respondents who did BSE even though they did not have a history of breast cancer in their families, namely 14 people (32.6%) compared to 12 people (27.9%). While in respondents who did not have a history of breast cancer in their families, the majority did not do BSE, namely 13 people (30.2%) out of 14 people. Regarding the relationship between family breast cancer history and BSE behavior showed no significant relationship between respondents' attitudes and BSE behavior, the results of p value 0.560 < 0.05. This result is in line with research reported by (Yuniar, 2019) that from the chi-squre test obtained p-value = 0.591 (p > 0.05), it can be concluded that there is no relationship between a family history of breast cancer with the respondent's breast self-examination behavior (BSE).

The results showed that the majority of respondents did not have a history of breast cancer in their families, behaving well. This explains that respondents with a background in health students who are accustomed to getting health education, so even though respondents do not have a history of breast cancer in the family, respondents know how to deal with disease problems, especially breast cancer patients and how to detect early with the BSE method and behave to do so. Research reports that women who perceive self-susceptibility to breast cancer as a serious disease tend to avoid, so few practice BSE (Yuniar, 2019). However, other results may differ if the history occurs in him, a person's belief that he is prone to health problems or serious illness, it will be a threat to him so as to make himself to carry out certain

health behaviors that are beneficial to reduce the threat (Irfannur, 2021). Respondents who have a history of breast cancer in themselves, will tend to have anxiety and feel themselves more susceptible to suffer from breast cancer again. So that from this anxiety, respondents have the awareness to do BSE as an early detection if a lump is suspected to occur around the breast, and immediately conduct further examination to a health facility (Irfannur, 2021).

CONCLUSION

Multivariate results showed a relationship between knowledge and attitudes towards BSE behavior (knowledge p value 0.019 < 0.05. attitude p value 0.031 < 0.05), but there was no relationship between family breast cancer history and BSE behavior p value 0.560 < 0.05. It is hoped that this research can be used as input on health service practices in various health service settings in Educational, Social and Independent Practice Institutions which can be used as a source of information in conducting counseling, education and counseling as a collaborative preventive effort to increase knowledge, attitudes, and awareness to do BSE.

REFERENCES

Marfianti, E. (2021). Peningkatan Pengetahuan Kanker Payudara dan Ketrampilan Periksa Payudara Sendiri (SADARI) untuk Deteksi Dini Kanker Payudara di Semutan Jatimulyo Dlingo. Jurnal Abdimas Madani Dan Lestari (JAMALI), 25-31.

Fatimah, H. R. (2018). Faktor-Faktor Yang Mempengaruhi Perilaku Detek Kanker Payudara Dengan Sadari Pada Wanita Kecamatan Tegalrejo Kota Yogyakarta. (Doctoral dissertation, Poltekkes Kemenkes Yogyakarta).

Lestari, P. &. (2019). Pentingnya pemeriksaan payudara sendiri (sadari) sebagai upaya deteksi dini kanker payudara. Indonesian Journal of Community Empowerment (IJCE), 1(2).

Irawan, E. (2018). Faktor-faktor pelaksanaan sadari/breast self examination (BSE) kanker payudara (literature review). Jurnal Keperawatan BSI, 6(1).

Sarina, S. T. (2020). faktor yang berhubungan dengan perilaku SADARI sebagai deteksi dini kanker payudara pada mahasiswi FKM Unhas. Hasanuddin Journal of Public Health, 1(1), 61-70.

Purba, A. (2018). Hubungan Pengetahuan Dan Sikap Tentang SADARI Dengan Tindakan WUS Melakukan Pemeriksaan SADARI Di Puskesmas Sunggal Tahun 2018. Jurnal Maternal dan Neonatal, 3(1), 1-13.

Arafah, A. B. (2018). Faktor Yang Berhubungan Dengan Perilaku Ibu Rumah Tangga Melakukan Pemeriksaan Payudara Sendiri (Sadari). The Indonesian Journal of Public Health, 12(2).

Wea, L. D. (2022). Edukasi Sadari Sebagai Upaya Pencegahan Kanker Payudara Pada Kelompok Khusus: Sebuah Tindak Lanjut Hasil Riset. Reswara: Jurnal Pengabdian Kepada Masyarakat, 3(2), 757-763.

Suryawati, I. &. (2022). Hubungan Pengetahuan Remaja Dengan Perilaku Pemeriksaan Payudara Sendiri (Sadari). Jurnal Assyifa Ilmu Keperawatan Islami, 7(1).

Lombu, F. K. (2023). Pengaruh Pendidikan Kesehatan Terhadap Pengetahuan dan Sikap WUS Pada Pemeriksaan Payudara Sendiri (Sadari) di Ruamh Sehat Arafah Medan Tahun 2022. Repository.medikasuherman.ac.id.

Hardiyanti, D. (2018). Pengaruh Pendidikan Kesehatan Berbasis Komunitas Terhadap Pengetahuan, Sikap Dan Praktik Pemeriksaan Payudara Sendiri (Sadari) Pada Perempuan Di Wilayah Puskesmas Martapura 1 . Repository Universitas Airlangga.

Puspitasari, Y. D. (2019). Hubungan Peran Keluarga dengan Pengetahuan, Sikap dan Praktik Pemeriksaan Payudara Sendiri (SADARI) pada Remaja Putri Di Kecamatan Jelbuk Jember, Jawa Timur. Jurnal Kesehatan Reproduksi, 10(1), 59-6.

Yuniar, Z. F. (2019). Hubungan Antara Faktor Personal Dengan Perilaku Pemeriksaan Payudara Sendiri (Sadari) Pada Mahasiswi S1 Kesehatan Masyarakat Universitas Airlangga. Jurnal Keperawatan Muhammadiyah, 4(2).

Irfannur, A. M. (2021). Hubungan Riwayat Menyusui Dukungan Keluarga dan Riwayat Keluarga dengan Kejadian Kanker Payudara. Borneo Studies and Research, 2(2), 1247-1253.

Maulidia, H. R. (2022). Faktor-faktor yang Berhubungan dengan Praktik Pemeriksaan Payudara Sendiri (SADARI) dalam Upaya Deteksi Dini Kanker Payudara pada Santriwati Pondok Pesantren di Kecamatan Mijen Kota Semarang Tahun 2021. Media Kesehatan Masyarakat Indonesia, 21(3), 162-168.

Juwita, L. &. (2018). Pengetahuan pemeriksaan payudara sendiri (SADARI) terhadap sikap dan perilaku pada remaja putri. http://repository.ukwms.ac.id/id/eprint/25319, 4(2), 12-16.

Kurniawati, T. S. (2021). Hubungan Tingkat Pengetahuan Sadari Dengan Praktik Sadari Pada Remaja Putri Di Desa Sinar Agung Kecamatan Way Tenong Kabupaten Lampung Barat. Midwifery Care Journal, 2(3), 97-102.

Mardiana, A. &. (2021). Hubungan Pengetahuan Pemeriksaan Payudara Sendiri (SADARI) Dengan Kejadian Kanker Payudara Di Kalimantan Timur. Borneo Studies and Research, 2(2), 1052-1059.

Ferlay J, E. M. (2020). International Agency for Research on Cancer 2020. Glob Cancer Obs Cancer , 419:1–2.

Hero, S. (2021). Faktor Risiko Kanker Payudara. Jurnal Medika Hutama, 1533-1537.

Mathew, M. L. (2021). Knowledge Regarding Breast Cancer And Breast Self Examination Among Females. Idc International Journal, 8.

Koc, G. G.-S.-C. (2019). Female university students' knowledge and practice of breast self-examination in Turkey. Nigerian journal of clinical practice, 22(3), 410-415.

Fondjo, L. A.-A. (2018). Comparative assessment of knowledge, attitudes, and practice of breast self-examination among female secondary and tertiary school students in Ghana. International journal of breast cancer.

Heena, H. D.-S. (2019). Knowledge, attitudes, and practices related to breast cancer screening among female health care professionals: a cross sectional study. BMC women's health, 19, 1-11.