ADOLESCENT WOMEN'S KNOWLEDGE ABOUT BREAST CANCER DETECTION THROUGH (SADARI) SIDOARJO NURSING D3

**Putri Romadloni1, Loetfia Dwi Rahariyani2**

1 Progam Studi D3 Keperawatan Sidoarjo, Poltekkes Kemenkes Surabaya, Sidoarjo, Indonesia

Email: putriromadloni20@gmail.com

2 Progam Studi D3 Keperawatan Sidoarjo, Poltekkes Kemenkes Surabaya, Sidoarjo, Indonesia

Email: rahariyani@yahoo.com

**Abstract**

*Currently, many young women suffer from breast cancer, due to not doing early detection of breast cancer by breast self-examination (BSE). BSE is an early detection effort to find lumps or abnormalities in the breast. This study used a descriptive research design with a sample of 178 respondents using a total sampling technique. The questionnaire used for data collection is in digital form using Google forms with reference to specific objectives consisting of knowledge, sources of information and implementation of BSE. Based on the results of the study, it was shown that the majority of young women's knowledge about early detection of breast cancer through breast self-examination (BSE) was sufficient (65.2%). The majority of knowledge is based on information sources from 110 people and most of them get information from electronic media. Most of the 86 people who had performed BSE had done it once. Seeing the results of this study, it is hoped that D3 Nursing students will know the importance of doing BSE correctly. Because breast self-examination (BSE) is very important for the D3 Nursing Study Program in Sidoarjo because they are studying in the health sector who will become potential health educators and educators who will later go into the community.*

***Keywords*** *: Knowledge, Sources of Information, Implementation of BSE*

**INTRODUCTION**

Breast cancer is a disease that is often a frightening specter for women(Azzubaidi & Sugiharto, 2020). Cancer is a non-communicable malignant disease characterized by abnormal or continuous and uncontrolled cell growth which can damage surrounding tissues and can spread to distant places called metastases Cancer is one of the main causes of death worldwide until now it has become a health problem in the world. (Periselo, 2022)

According to the World Health Organization (WHO) in 2020 and the Ministry of Health of the Republic of Indonesia (Kemenkes RI) in 2020, breast cancer is the most common cancer suffered by women. Breast cancer is currently one of the most common types of cancer in women with a very high prevalence in all countries in the world(Mardiana & Kurniasari, 2021).

Breast cancer ranks first of all cancers. Based on Global Burden of Cancer (GLOBOCAN) data for 2020, it is estimated that the incidence of breast cancer in Indonesia is 68,858 cases (16.6%) out of a total of 396,914 new cases of cancer in Indonesia with deaths reaching more than 22 thousand cases. The prevalence of cancer in Indonesia is quite high from the data from the Basic Health Research report (RISKESDAS) (Kemenkes RI, 2018).

Breast cancer ranks 7th of all cancers. The prevalence of cancer in Indonesia is quite high(Kusumawaty et al., 2021). Data presented by the Directorate of Prevention and Control of Non-Communicable Diseases of the Indonesian Ministry of Health (2020) revealed that the highest incidence rate for women was breast cancer, namely 1.4 per 1000 population in 2013, increasing to 1.79 per 1000 population in 2018.

Symptoms of breast cancer occur due to breast tissue experiencing malignancy so that it grows to form a lump. These lumps are usually hard textured and irregular in shape, and difficult to move (Yulinda & Fitriyah, 2018). This disorder is caused by a gene defect that regulates the development and growth of breast cells, so that the growth of these cells cannot be controlled (Maulidia et al., 2022). The risk factors are very diverse, namely age, genetic factors, use of drugs, unhealthy lifestyles, use of cosmetics, use of birth control pills (Berek et al., 2019). The factors that influence this are the patient's lack of knowledge about the signs and symptoms of cancer (Sihite et al., 2019).

Technological developments in the world of medicine, there are various ways to detect abnormalities in the breast early, including thermography, mammography, ductography, breast biopsy and ultrasound(Lestari & Wulansari, 2018). Besides that, there is also an easier and more efficient way to be able to detect breast abnormalities by yourself which is known as breast self-examination (BSE)(Friska Realita et al., 2022).

BSE is a screening method used for early detection of breast cancer by looking and feeling to find abnormalities, lumps, and swelling in the breast (BSE) begins when a teenager has reached puberty and is experiencing breast development (Marfianti, 2021).

Early detection efforts have been encouraged by the government through efforts in the prevention movement that have been implemented for 5 years throughout Indonesia, in the form of a series of activities which include promotive, preventive, early detection and follow-up activities (Fauziah et al., 2022). Through these activities it is hoped that public awareness and concern, especially in controlling cancer risk factors and early detection of cancer so that it is hoped that the death rate from cancer can be reduced (Purba & Sari, 2018).

BSE is expected to reduce mortality and morbidity, and lower health costs. Therefore it is necessary to disseminate knowledge about early detection of breast cancer (Kurniawati et al., 2021).

At the age of 20 a woman is recommended to do a breast self-examination every month or every three months to be able to detect early if there are abnormalities and immediately get the right treatment (Role et al., 2021). One group that has reached that age is female students. At that time a female student entered the stage of late adolescent development (adolescence) (Istianah & Fatmawati, 2019).

Female students who study in the health sector will generally become candidates for public health extension services(Heriyanti et al., 2018). Based on the results of observations, the researchers were interested in seeing the knowledge of young women about early detection of breast cancer through self-examination with the BSE technique at Diploma 3 Nursing, Sidoarjo.

**RESEARCH METHODS**

The research design used is "descriptive" research, namely a research design that aims to describe (describe current events), is carried out systematically and places more emphasis on factual data than on conclusions by conducting surveys on variables (Nursalam, 2011).

In terms of time, this research is a cross-sectional study, namely a study in which the variables including risk factors and variables including effects are observed simultaneously at the same time.

**Study Population**

The population in the study are subjects who meet the criteria that have been set (Nursalam, 2013). In this study, the population used was female students at grades 1, 2 and 3 of the Diploma 3 Nursing Study Program in Sidoarjo, totaling 178 students.

**Sample**

The sample is an object that is examined and is considered to represent the entire population (Nursalam, 2013). The sample for this study was taken from the number of D3 Nursing students in Sidoarjo who met the inclusion criteria. The inclusion and exclusion criteria of the samples taken are as follows:

1. Inclusion Criteria

 Inclusion criteria are the general characteristics of research subjects in a study.

A. Adolescent girls grades 1,2 and 3 at D3 Nursing Sidoarjo.

2. Exclusion Criteria

 Exclusion criteria are eliminating or removing subjects who meet the inclusion criteria from the study for various reasons.

A. Young women who refuse to fill out informed consent.

**Sampling Technique**

According to (Notoatmodjo, 2018)sampling techniques are methods or techniques for determining samples so that these samples can represent the population. The sampling technique used in this research is total sampling. Total sampling is taking a sample that includes the entire population.

**Variable Indentification**

Variable is something that is used as a facility for measurement and or manipulation of a study (Nursalam, 2013). The variable of this study used a single variable, namely the knowledge of young women about early detection of breast cancer through breast self-examination (BSE) at Diploma 3 Nursing, Sidoarjo.

**Operasional Definition**

The operational definition is the process of formulating or giving meaning to each variable for the sake of accuracy, communication, and replication in order to provide everyone with the same understanding of the variables raised in a study (Nursalam, 2013).

**Data Collection and Data Processing**

The research was conducted at the Sidoarjo Nursing Diploma 3 campus, this study distributed questionnaires using the online/online google form. Retrieval of data on filling out the Google Form questionnaire will automatically be completed when filling out the questionnaire. Data collection was carried out from February to March.

In the data processing process there are steps that must be taken including:

1. Data Assessment (Editing)

The study of research data re-examined respondents who were willing to be research objects and observed the results.

2. Coding.

The activity of converting data in the form of letters to data in the form of numbers. The purpose of coding is to make it easier when entering data.

3. Entry/Processing

 After all the questionnaires are filled in completely and correctly, and have also gone through coding, the next step is to process the data so that it can be analyzed. Data processing was carried out by entering data from a questionnaire to a computer program package.

4. Cleaning

 The activity of correcting data that has been entered whether there is an error or not.

**Research Ethics**

Research ethics are the principles and rules that distinguish right from wrong actions expected in research (Kurniawati et al., 2021). Research protects participants by carefully identifying all possible risks of harm and any benefits that an individual may gain during the study, including.

1. Consent Sheet (Informed Consent).

 The consent form was given to the subject to be studied, namely the researcher explain the aims and objectives of the research conducted. If the respondent agrees to be researched, the respondent will choose the questionnaire and the researcher must respect the respondent's rights.

1. Anonymity.

Respondent confidentiality is maintained and researchers will not include it the name of the respondent on the data collection sheet.

1. Confidentiality.

Confidentiality of respondent information must be maintained by researchers, and will reported as the results of his research is the group.

**RESULT S AND DISCUSSION**

**Result**

**Tabel 1 Respondent Characteristics**

|  |  |  |  |
| --- | --- | --- | --- |
| No | characteristics | Frequency | Presentase (%) |
| 1 | Umur * Minimum
* Maximum
* Average
 | 5212114 | 29,26,864 |
| 2 | Level Of Education* Level 1
* Level 2
* Level 3
 | 454489 | 25,324,750 |
| 3 | Information related to BSE* Ever
* Never
 | 11068 | 61,838,2 |

**Tabel 2 Frequency Distribution of Knowledge of Young Women About BSE**

|  |  |  |  |
| --- | --- | --- | --- |
| No | Knowledge | Frequency | Presentase (%) |
| 123 | Good EnoughDeficient  | 5011612 | 28,165,26,7 |

**Tabel 3 Frequency Distribution of Knowledge Frequency of Young Women About BSE Based on Information Sources**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | knowledge | Information | Resources | explation |
| ever | never | 1 | 2 | 3 | 4 | 5 | 6 |  |
| 123 | Good enoughdeficient | 33761 | 174011 | 351 | 17410 | 2   50 | 650 | 060 | 5140 | Resources1. Print media, eg newspapers2.Electronic media, for example, cell phones, radio, tv3. School teacher4. Friends5. Family members6. Health workers |

**Tabel 4 Table 4 Frequency Distribution of**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | knowledge | Implementation BSE | Frequency Implementation of BSE | Explanation |
| ever | never | 1 | 2 | 3 | 4 |  |
| 123 | Good Enough Deficient  | 29561 | 196211 | 10191 | 10170 | 6110 | 390 | FrequencyImplementation of BSE1. One Time2. Every Month3. Three Months4. One Year |

**BSE Implementation**

**Discussion**

In this discussion, the results of research on young women's knowledge of breast cancer detection through BSE in Sidoarjo D3 Nursing will be described. Presentation of data on research results begins with general data about young women's knowledge of breast cancer detection through SADARI D3Keperawatan Sidoarjo including age, level.

Meanwhile, specific data is presented about knowledge and cross-tabulation of knowledge with sources of information and knowledge with BSE implementation(Sinaga & Ardayani, 2016).

After observing using an online/online serara questionnaire using the Google form in March 2023, the results will be explained below:

1. Based on table 1 it shows that out of 178 respondents, there were 89 people (50%) at level 3, 45 people (25.3%) at level 1, and 44 people (24.7%) at level 2. The majority of the respondents' education level was level 3. Table 1 of the frequency distribution shows that of the 178 respondents who had received information related to BSE, 110 people (61.8%) had received information related to BSE, 68 people (38.2%)(Parmin, 2018). The majority of respondents had received information regarding breast self-examination (BSE). Table 1 of the frequency distribution shows that of the 178 respondents, the highest age was 23 years, the lowest was 18 years and the average age was 20 years.
2. Based on table 2, it shows that the knowledge of young women about breast self-examination (BSE) from 178 respondents found that 116 people (65.2%) had sufficient knowledge, 50 people (28.1) had good knowledge and 12 people had less knowledge. The results of this study are in line with research conducted (Utami et al., 2020) that of the 39 respondents whose knowledge of BSE was studied, female nursing students generally had sufficient knowledge, namely 18 respondents (46.2%) in the sufficient category, 13 respondents (33.3) in the good category, 8 respondents (20.5) in the less category. The percentages obtained show that many respondents have a sufficient level of knowledge about BSE.

Researchers assume that the level of knowledge of the majority of respondents are knowledgeable enough. This shows that D3 nursing students in Sidoarjo where studying in the field of nursing and health only know but do not understand BSE.

1. Based on table 3 shows that based on information sources, out of 178 respondents who got good knowledge based on information sources, 33 people got information sources through electronic media 17 people, 6 friends, 5 health workers, 3 print media, 2 school teachers . Those who received sufficient knowledge based on information sources were 76 people who had obtained information sources through electronic media 41 people, 14 health workers, 6 family members, 5 print media, 5 school teachers, 5 friends. And those who get less knowledge based on information sources are 1 person who has obtained information sources through print media. The results of this study are in line with research conducted (Hidayani et al., 2022) that of the 72 respondents studied, 38 people (52 .8%) and who never got a source of information 34 people (47.2%). The percentage obtained shows that the respondent has received information. The researcher assumes that the majority of respondents have obtained sources of information from electronic media. This is because a lot of information in the current era/time is through electronic media or social media.
2. Based on table 4 shows that the implementation of BSE shows that out of 178 respondents with good knowledge, 29 people have done BSE with a frequency of BSE implementation, 10 people do it once, 10 people do it every month, 6 people three months, 3 people one year and well-informed who did not carry out BSE, there were 19 people. from those with sufficient knowledge, 56 people had performed BSE with a frequency of performing BSE, 19 people had done it once, 17 people every month, 11 people three months, 9 people one year and had sufficient knowledge who did not do BSE, 62 people got it. from lack of knowledge, 1 person had carried out BSE with a frequency of implementation, 1 person was found once and with less knowledge, 11 people had not carried out BSE. The results of this study are in line with research conducted (Lestari & Wulansari, 2018) that out of 17 people never, 15 people have, 6 often always. The percentage shows that most of the respondents have never done BSE. Researchers assume that breast self-examination (BSE) is very important for young women, because it can be used as an early detection of breast cancer which is very cheap, easy and can even be said to be free of charge, but most do not know the correct procedure for self-breast examination (BSE). and don't realize how big the benefits are, so most of them don't do breast self-examination (BSE). This is possible because there is no counseling about breast self-examination in young women.

**CONCLUSIONS AND SUGGESTION**

**Conclusions**

 Based on the results of research on knowledge of young women about early detection of breast cancer through breast self-examination (BSE) at D3 Nursing Sidoarjo, the conclusions that can be drawn from this study are as follows:

1.The characteristics of the respondents, totaling 178 people, were obtained from the results of the study, the majority of respondents at level 3 education were 89 people and most of the respondents had received sources of information, totaling 110 people and the average age was 20 years.

2.Knowledge Based on information sources, most of them have obtained information from electronic media, for example cell phones, radio and television.

3.Knowledge of young women about early detection of breast cancer through breast self- examination (BSE) is dominant in the moderate category, with 116 people

4.Most of them have never done breast self-examination (BSE).

**Suggestion**

Based on the conclusions of the research results and the benefits of this research, the suggestions that the writer can convey are as follows:

1. For Research Sites

It is hoped that this research can be input and additional knowledge for young women in the D3 Nursing Study Program in Sidoarjo so they can perform BSE to detect early any abnormalities in the breast and know how to do BSE properly.

2. For Nursing Education Institutions

It is hoped that the results of this study can be used as a source of literature for nursing science so that students have a good understanding of breast self-examination (BSE).

3. For Researchers

As a study material for researchers in increasing knowledge about young women's knowledge about early detection of breast cancer through breast self-examination (BSE), and it is hoped that researchers can disseminate this research so that they care about the importance of doing BSE from an early age.

**REFERENCE**

Azzubaidi, F. Z., & Sugiharto, S. (2020). Pengetahuan dan sikap tentang pemeriksaan payudara sendiri (SADARI) sebelum dan sesudah dilakukan penyuluhan pada mahasiswi Fakultas Kedokteran Universitas Tarumanagara. *Tarumanagara Medical Journal*, *2*(2), 252–258. https://doi.org/10.24912/tmj.v3i1.9725

Berek, P. A. L., Niron, C. L. A., Riwoerohi, E. D. F., & Fouk, M. F. W. A. (2019). Gambaran Tingkat Pengetahuan Remaja Putri Tentang Pemeriksaan Payudara Sendiri Di Sma Negeri 1 Atambua. *Jurnal Kebidanan*, *8*(1), 16–23. https://doi.org/10.35890/jkdh.v8i1.110

Fauziah, A. N., Maesaroh, S., & Suparti, S. (2022). Efektivitas Penyuluhan Berbasis Whatsapp Terhadap Pengetahuan dan Praktek SADARI Saat Pandemi Corona. *Jurnal Formil (Forum Ilmiah) Kesmas Respati*, *7*(1), 25. https://doi.org/10.35842/formil.v7i1.417

Friska Realita, Noveri Aisyaroh, & Erah. (2022). Hubungan Penyuluhan Sadari dengan Tingkat Pengetahuan SADARI: Literatur Review. *Media Publikasi Promosi Kesehatan Indonesia (MPPKI)*, *5*(5), 494–502. https://doi.org/10.56338/mppki.v5i5.2151

Heriyanti, E., Arisdiani, T., & Yuni Puji Widyastuti. (2018). Hubungan Tingkat Pengetahuan Dan Motivasi Dengan Tindakan Pemeriksaan Payudara Sendiri (Sadari) Pada Remaja Putri. *Community of Publishing in Nursing*, *6*(3), 143–156. https://ojs.unud.ac.id/index.php/coping/article/download/53580/31753

Hidayani, Jannah, M., & Patras, K. (2022). Hubungan Sumber Informasi, Dukungan Teman Sebaya dan Sikap Remaja Putri Terhadap Perilaku SADARI. *SIMFISIS Jurnal Kebidanan Indonesia*, *1*(3), 114–121. https://doi.org/10.53801/sjki.v1i3.39

Istianah, S., & Fatmawati, Y. (2019). *Masa remaja adalah masa transisi antara masa anak-anak dengan masa dewasa yang disebut dengan pubertas . Selama pubertas remaja mengalami perubahan dalam bentuk perubahan kognitif yaitu perubahan kemampuan berfikir , pengetahuan dan bahasa . Adapun Peruba*. 131–139.

Kemenkes RI. (2018). *Profil Kesehatan Indonesia*. Kementerian Kesehatan RI.

Kurniawati, T., Setiyowati, W., & Puspitasari, A. (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. https://doi.org/10.31983/micajo.v2i3.7494

Kusumawaty, J., Noviati, E., Sukmawati, I., Srinayanti, Y., & Rahayu, Y. (2021). Efektivitas Edukasi SADARI (Pemeriksaan Payudara Sendiri) Untuk Deteksi Dini Kanker Payudara. *ABDIMAS: Jurnal Pengabdian Masyarakat*, *4*(1), 496–501. https://doi.org/10.35568/abdimas.v4i1.1177

Lestari, P., & Wulansari. (2018). Pentingnya Pemeriksaan Payudara Sendiri ( SADARI ) Sebagai Upaya Deteksi Dini Kanker Payudara. *Indonesian Journal of Community Empowerment (IJCE)*, *1161*, 55–58. http://jurnal.unw.ac.id:1254/index.php/IJCE/article/view/327

Mardiana, A., & Kurniasari, L. (2021). Hubungan Pengetahuan Pemeriksaan Payudara Sendiri ( SADARI ) dengan Kejadian Kanker Payudara di Kalimantan Timur. *Borneo Student Research*, *2*(2), 1052–1059.

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)*, *3*(1), 25–31. https://doi.org/10.20885/jamali.vol3.iss1.art4

Maulidia, H. R., Prabamurti, P. N., & Indraswari, 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. https://doi.org/10.14710/mkmi.21.3.162-168

Notoatmodjo. (2018). *Metodologi Penelitian Kesehatan*. Rineka Cipta.

Nursalam. (2011). *Proses dan Dokumentasi Keperawatan Konsep dan Praktik*. Salemba Medika.

Nursalam. (2013). *Metodologi Penelitian Ilmu Keperawatan* (edisi 3). Salemba Medika.

Parmin, J. (2018). Hubungan Pengetahuan dan Sumber Informasi dengan Pelaksanaan Sadari di SMAN Bernas Pangkalan Kerinci. *Doppler Universitas Pahlawan Tuanku Tambusai*, *2*(2), 13–20.

Periselo, H. (2022). *Helen Periselo 1 , Nuraeni Semmagga 2 /*. *9*(1).

Purba, A., & Sari. (2018). Hubungan Pengetahuan Dan Sikap Tentang Sadari Dengan Tindakan Wus Melakukan Pemeriksaan Sadari Di Puskesmas Sunggal Tahun 2018. *Jurnal Maternal Dan Neonatal*, *3*(1), 1–12.

Role, T. H. E., Peer, O. F., The, G., Of, M., Of, I., Detection, B., Breast, O. F., & In, C. (2021). *the Role of Peer Group the Motivation of Implementation of*. *3*(1), 1–6.

Sihite, E. D. O., Nurchayati, S., & Hasneli, Y. (2019). Gambaran Tingkat Pengetahuan Tentang Kanker Payudara Dan Perilaku Periksa Payudara Sendiri (Sadari). *Jurnal Ners Indonesia*, *9*(2), 8. https://doi.org/10.31258/jni.10.1.8-20

Sinaga, C. F., & Ardayani, T. (2016). Hubungan Pengetahuan Dan Sikap Remaja Putri Tentang Deteksi Dini Kanker Payudara Melalui Periksa Payudara Sendiri Di Sma Pasundan 8 Bandung Tahun 2016. *Kartika Jurnal Ilmiah Farmasi*, *4*(1), 16–19. https://doi.org/10.26874/kjif.v4i1.52

Utami, S., Kesehatan, F., Samawa, U., Yuliana, N., Kesehatan, F., & Samawa, U. (2020). *1115-Article Text-3449-1-10-20230205*. 1–6.

Yulinda, A., & Fitriyah, N. (2018). Efektivitas Penyuluhan Metode Ceramah Dan Audiovisual Dalam Meningkatkan Pengetahuan Dan Sikap Tentang Sadari Di Smkn 5. *Jurnal Promkes*, *6*(2), 116–128.