

## Training on Early Detection of Breast Cancer Through Sadari (*Breast Self Examination*) as Control of Non-Communicable Diseases (NCDs)

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### Abstract

Breast cancer is the most common type of cancer in women in Indonesia. Early detection through SADARI can help identify changes in the breast that may be early signs of cancer. The aim of this activity is to increase the knowledge and skills of women in carrying out SADARI as an effort to detect breast cancer early. The method used is counseling and practical training on SADARI. The training participants were 40 women of productive age who lived in the Sendang mulyo sub-district. The results of this activity showed an increase in participants' knowledge and skills in carrying out SADARI as measured through pre-test and post-test. Before the training, only 5% of participants understood the correct way to SADARI. After training, this figure increased to 97.5%. The conclusion of this activity is that SADARI training is effective in increasing the knowledge and skills of women in the Sendang mulyo sub-district.

**Keywords:** Breast Cancer, Education, SADARI



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### INTRODUCTION

Breast cancer is a non-communicable disease caused by abnormal and uncontrolled growth of body tissue cells. Cancer cells will become malignant, grow rapidly and can spread to other places and cause death if not immediately prevented. WHO states that the top five cancers in the world are breast cancer, lung cancer, colorectal cancer, stomach cancer and liver cancer, which account for the highest mortality rate mmm. Cancer is the leading cause of death in developed countries and the second leading cause of death in developing countries (Taqiyah & Jama, 2020).

One of the factors for the high incidence rate is the lack of breast cancer education since adolescence in detecting and treating breast cancer early (Novelia & Carolin, 2021). The high mortality rate due to cancer also occurs because patients who come to health services are already in an advanced stage. If the patient is already at an advanced stage, the healing process will be difficult (Sakti et al., 2023). The lack of public knowledge about cancer and how to detect it is one of the causes of the high mortality rate due to breast cancer (Hidayati, 2022). The government has several policies and programmes to control breast cancer. These programmes aim to improve early detection, discovery and early follow-up of cancer, improve the quality of life of cancer patients, and reduce cancer mortality (Hidayati, 2022).

The government has a number of policies and programmes to control breast cancer. The programme aims to increase early detection, discovery and early follow-up of cancer, improve the quality of life of cancer patients, and reduce cancer mortality (Julaecha, 2021). To achieve these goals, a cancer control programme is implemented which includes promotive and preventive efforts by increasing public knowledge of breast cancer and early detection of cancer (Marthasari et al., 2022).

Seeing the magnitude of the influence and impact of breast cancer on women, it becomes the focus of attention of all parties to prevent, detect and accelerate recovery from the growth

of cancer. Women of childbearing age are people who have a high potential to experience breast cancer caused by many factors. In this activity, we choose women of Sendangmulyo Village, Tembalang District, Semarang City, Central Java.

Through SADARI women are guided to self-examination for breast cancer. women can find abnormalities in the size and shape of the breast on self-examination (Qomaryah, 2017). The lack of Indonesian women, especially teenagers in doing SADARI is also motivated by the fact that many Indonesian teenagers are not yet sensitive to their own breast care, they are more sensitive to acne that appears on the face than the symptoms of breast cancer, and also motivated by the lack of information and willingness to explore information about breast cancer prevention.

## RESEARCH METHODS

Breast cancer is a disease that is feared by many women. This disease will be difficult to cure if found at an advanced stage. But with early detection, it will help women find out if there are abnormalities in their own breasts. In this community service activity, we present a form of detection through SADARI education towards early detection of breast cancer in Sendangmulyo PKK women. This learning is aimed at PKK women, because PKK women are classified as women of childbearing age who have a higher potential for breast cancer. Where the mother herself will be the one who is able to detect abnormalities in her breasts.

The service activity was carried out on 9 June 2024 in Sendangmulyo Village, Semarang City. Participants were 40 women of productive age. In general, the series of activities are introductions, taking baseline data (pre-test), educational videos, doing self-detection.

The following are details of the stages of activities that will be carried out:

1. Formulate a plan for SADARI (Breast Self Examination) education activities.
2. The activity begins with a field survey by contracting the time (date) of the activity with the head of the PKK mother.
3. Making a SADARI (Breast Self-Examination) education booklet.
4. Pre-test stage of distributing pre-test questionnaires using an online form to find out the extent of PKK mothers' knowledge about SADARI in Early Detection of Breast Cancer.
5. Running the educational activity programme that has been prepared
6. Conducting SADARI socialisation on the importance of increasing awareness in women of childbearing age to be able to self-detect breast cancer.
7. Conduct training to perform SADARI
8. Completing a post test on SADARI in Early Detection of Breast Cancer



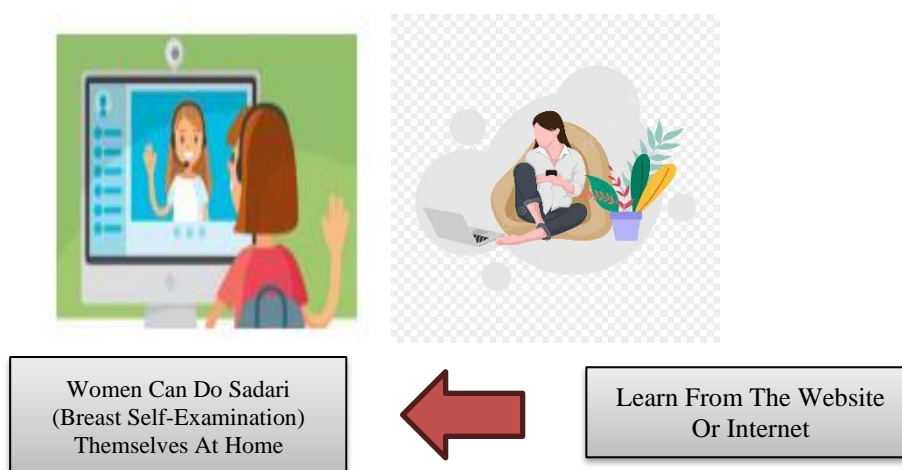


Figure 1. The Flow of Implementation of Community Service Activities

## RESEARCH RESULTS AND DISCUSSION

### Research Result

Community service activities obtained results:

Table. 1 Frequency Distribution According to SADARI Knowledge

Knowledge Level	Pre-Test	Result Post-Test	<i>p-Value</i>
Less	38 (95%)	0 (0%)	0.000
Enough	1(2.5%)	0 (0%)	
High	1(2.5%)	40 (100%)	
Total	40 (100%)	40 (100%)	

The results shown in the table indicate a significant increase in knowledge from the pre-test and post-test results given before and after the counselling was conducted. In the pre-test, there were 1 women of childbearing age with sufficient knowledge and 1 with high knowledge. However, in the post-test, 40 women of childbearing age had high knowledge. This shows an increase in knowledge related to the results of counselling or community service activities.

In addition, the mean results show that the post-test value is higher than the pre-test, which means that there is an increase in the average knowledge of the target. The *p-value* of *paired t-test* obtained is 0.000, which means less than  $\alpha$  0.05. This indicates that there is a significant effect of counselling on knowledge. The results of this study confirm the importance of health education related to SADARI in increasing the knowledge and awareness of women of productive age of the importance of breast self-examination to prevent breast cancer as early as possible (Noer et al., 2021)



Figure 2. Breast Cancer Education





Figure 3. Leaflet distribution and SADARI training

## Discussion

The education activity started by asking questions about the participants' understanding of breast cancer and SADARI screening. Only two people answered, indicating that 95% of participants had no knowledge of the topic. Next, counselling on early detection of breast cancer was conducted through a presentation that covered the definition of breast cancer, stages of cancer, causes and risk factors, management, and prevention through early detection with SADARI. SADARI material included the definition, purpose of the examination, the right time to do the examination, and the steps. After the presentation of the material, a demonstration of SADARI examination and distribution of leaflets were carried out. The activity ended with a discussion and question and answer session about the material and practice of SADARI examination which was attended by three participants.

This is in line with counselling conducted by Noer R.M et al. (2021), which showed an increase in adolescent girls' knowledge about SADARI by 70% after counselling and video screening of SADARI examination (Noer et al., 2021). Similar results were also found in counselling by Asmalinda, W. et al. (2022), where 81.25% of participants were proficient in demonstrating SADARI examination after counselling and practice (Asmalinda et al., 2022). In the educational activities by Marfianti (2021), the knowledge of breast cancer and SADARI skills of mothers in Semutan Hamlet Jatimulyo Dlingo showed an increase after participating in education and training, based on the results of the pretest and post-test achievements. At the time of the pre-test, the average value obtained was  $56.875 \pm 9.310$ . This illustrates that the level of knowledge before this activity is still lacking. The average post-test score after the activity was completed was  $92.813 \pm 6.342$  (Marfianti, 2021). This indicates the success of the educational methods and tools used. Similar findings were also obtained in the service activities of Narsih, et al (2017) that the results of this activity were that all young women understood and understood SADARI well, besides that young women were also willing and able to practice SADARI so that it could be a solution in breast cancer prevention. The method used was to collaborate with SMK Darul Ulum and MTs Darul Ulum by providing counselling and training on SADARI to young women. The success indicators of this activity are that young women are able and willing to do SADARI and encourage young women to take active action to take responsibility for breast cancer prevention efforts (Narsih et al., 2017).

Community service activities carried out by Magfiroh et al. 2023 showed that community service has a use in increasing knowledge with the hope of improving behaviour related to the

importance of breast self-examination (SADARI) (Maghfiroh et al., 2023). Housewives who do not get information from informants tend not to do SADARI compared to housewives who get information from informants. Housewives who have difficulty accessing information are less likely to perform SADARI and housewives who do not receive support from health care providers are less likely to perform SADARI (Arafah R. Briliana, 2017). One method of early detection of breast cancer is breast self-examination (SADARI) with the aim of evaluating the impact of counselling on SADARI on increasing knowledge. There was an effect of increasing knowledge by using video media and demonstration methods before and after the intervention (Aeni & Yuhandini, 2018).

In this activity, the increase in skills with a high category in conducting SADARI increased by 97.5%. Breast cancer is actually not only women who can be affected but men can also get breast cancer due to obesity. So this activity is expected to make people aware and more attentive to the risk factors that can cause breast cancer (Sakti et al., 2023).

## CONCLUSION

The conclusion of this community service activity before the counselling, most of the participants of the community service activity did not understand well about breast cancer and how to do early detection through SADARI examination. However, after attending the counselling, there was an increase in participants' knowledge and their ability to perform SADARI skills. Through this activity, the participants were able to expand their understanding of breast cancer. This encourages them to try to make prevention efforts by conducting early detection through SADARI regularly, as well as implementing a healthier lifestyle. Therefore, this community service activity proved effective in increasing participants' knowledge and skills related to early detection of breast cancer through SADARI. This is expected to encourage them to be more proactive in maintaining breast health and preventing breast cancer.

## BIBLIOGRAPHY

- Aeni, N., & Yuhandini, D. S. (2018). Pengaruh Pendidikan Kesehatan Dengan Media Video Dan Metode Demonstrasi Terhadap Pengetahuan SADARI. *Care : Jurnal Ilmiah Ilmu Kesehatan*, 6(2), 162. <https://doi.org/10.33366/cr.v6i2.929>
- Arafah R. Briliana, A. ; N. B. H. (2017). C102\_Artikel. *The Indonesian Journal of Public Health*, 12, 143–153.
- Asmalinda, W., Setiawati, D., Khotimah, K., Sapada, E., Kemenkes Palembang, P., Selatan, S., Siti Khadijah Palembang, S., Kunci, K., Payudara, K., & Payudara Sendiri, P. (2022). Deteksi Dini Kanker Payudara Menggunakan Pemeriksaan Payudara Sendiri (Sadari) (Early Detection of Breast Cancer Using Breast Self-Examination). *Jurnal Abdikemas*, 4(1), 10–17. <https://doi.org/10.36086/j.abdikemas.v4i1>
- Hidayati, R. (2022). Pelatihan Deteksi Dini Cancer (Ca) Mammae dan Pemeriksaan SADARI Pada Kader Kesehatan. *Jurnal Pengabdian Masyarakat Indonesia*, 2(5), 523–529. <https://doi.org/10.52436/1.jpmi.715>
- Julaecha, J. (2021). Pendidikan Kesehatan tentang Deteksi Dini Kanker Payudara melalui Pemeriksaan Payudara Sendiri (SADARI). *Jurnal Abdimas Kesehatan (JAK)*, 3(2), 115. <https://doi.org/10.36565/jak.v3i2.162>
- Maghfiroh, A., Jati, R. P., & Ayuningtyas, F. (2023). Edukasi Pentingnya Sadari (Pemeriksaan Payudara Sendiri) Dan Sadanis (Pemeriksaan Payudara Klinis) Untuk Deteksi Dini Kanker Payudara. *Jurnal Pengabdian Masyarakat Kesosi*, 6(2), 36–43. <https://doi.org/10.57213/abdimas.v6i2.178>
- 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>
- Marthasari, N. K. P., Ariana, P. A., Pratama, A. A., Aryawan, K. Y., & Heri, M. (2022). SADARI: Upaya Mencegah Kanker Payudara Pada Usia Remaja. *Jurnal Abdi Masyarakat*, 2(2), 79–83. <https://doi.org/10.22334/jam.v2i2.26>
- Narsih, U., Rohmatin, H., & Widayati, A. (2017). Pendidikan dan Pelatihan tentang SADARI bagi Remaja Putri. *Jurnal Paradharma*, 1(1), 53–57. [https://www.jurnal.undhirabali.ac.id/index.php/para\\_dharma/article/view/218](https://www.jurnal.undhirabali.ac.id/index.php/para_dharma/article/view/218)
- Noer, R. M., Purba, N. H., & Suryadartiwi, W. (2021). Deteksi Dini Pencegahan Kanker Payudara. *JJM (Jurnal Masyarakat Mandiri)*, 5(2), 642–650.
- Novelia, S., & Carolin, B. T. (2021). Penyuluhan Kesehatan tentang Pentingnya Deteksi Dini Kanker Payudara dan Praktik Pemeriksaan Payudara Sendiri pada Remaja Putri melalui Zoominar. *Journal of Community Engagement in Health*, 4(2), 282–286. <https://doi.org/10.30994/jceh.v4i2.165>
- Qomaryah, S. (2017). *DETEKSI DINI KANKER PAYUDARA DI KELURAHAN LIMBUNGAN KECAMATAN*. 1(1), 57–64.
- Sakti, P. M., Muliani, M., & Admasari, Y. (2023). Siap Deteksi Dini Kanker Payudara Pada Remaja Putri Melalui Kelas Pendidikan Dan Pelatihan Sadari. *JMM (Jurnal Masyarakat Mandiri)*, 7(2), 1534. <https://doi.org/10.31764/jmm.v7i2.13771>
- Taqiyah, Y., & Jama, F. (2020). Pelatihan Sadari (Pemeriksaan Payudara Sendiri) sebagai Upaya Deteksi Dini Kanker Payudara pada Siswi SMK Kesehatan Baznas. *Indonesian Journal of Community Dedication*, 2(1), 17–21. <https://doi.org/10.35892/community.v2i1.262>