



BREAST SELF-EXAMINATION EDUCATION AND TRAINING (SADARI) AS AN EARLY DETECTION EFFORT FOR BREAST CANCER IN WOMEN OF CHILDBEARING AGE

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Abstract

Breast cancer is one of the most common types of cancer in women and is the leading cause of cancer death in women in various parts of the world. Early detection is crucial in increasing treatment success and reducing mortality rates. One easy-to-do early detection method is Breast Self-Examination (BSE), an examination carried out independently, regularly, and systematically by every woman to find abnormalities or lumps in the breasts from an early stage. This Community Service (PkM) activity aims to increase mothers' and young women's understanding of the importance of early detection of breast cancer through the BSE method. The activity was conducted in Pegaingan Hamlet, Bangkalan District, involving participants from among Madrasah Diniyah Al Munawaroh students and local mothers. The methods included interactive counseling, BSE demonstrations, and question-and-answer sessions. The activity results showed increased participants' knowledge about breast cancer and their ability to perform BSE independently. It is hoped that this activity can encourage healthy living behavior and awareness of the importance of early detection as a preventive measure against breast cancer.

Keywords: SADARI, breast cancer, early detection, educational counseling.

INTRODUCTION

Breast cancer is one of the types of cancer with the highest prevalence in Indonesia and the world. Based on data from the Global Cancer Observatory (GLOBOCAN) in 2020, breast cancer is the most significant contributor to new cancer cases in women, with an estimated more than 65 thousand cases each year in Indonesia. (Pratama *et al.*, 2024). More than half of these cases are diagnosed at an advanced stage, indicating a lack of community awareness and early detection skills. One inexpensive and straightforward method that is highly recommended in early detection efforts is breast self-examination, also known as SADARI (Sihombing, 2020).

SADARI (Breast Self-Examination) is an independent breast examination activity carried out by women to detect breast abnormalities or changes. This method is easy to do (Wulandari *et al.*, 2025), does not require special tools, and can be done routinely every month, especially for women of childbearing age. Unfortunately, awareness and knowledge about the importance of SADARI are still very low, especially in rural areas and among young women. (Kementerian Kesehatan RI, 2015).

Pegaingan Hamlet, located in Bangkalan District, is one of the areas where most of the population is women of childbearing age, including teenage students at Madrasah Diniyah Al Munawaroh. Based on the results of initial observations and discussions with community leaders, it is known that most mothers and teenage girls have never received education about breast cancer or how to do BSE properly. Lack of access to health information, limited facilities, and the existence of

stigma or shame towards reproductive health issues also hinder early detection efforts in this area. (Studi *et al.*, 2019).

Therefore, educational and training activities must be targeted, sustainable, and in accordance with the characteristics of the local community (Wulandari *et al.*, 2025). This community service is carried out as a form of academic contribution to increasing health literacy, especially about breast cancer, through a simple but effective educational approach (Ianatus Shofya Nurrohmah, 2019).

Community service activities are carried out in the form of interactive counseling, demonstrations of SADARI techniques, and direct training for two main target groups, namely female students of Madrasah Diniyah Al Munawaroh, as the younger generation, and local mothers as a group of adult women of childbearing age (Rosyida, 2019). In its implementation, participants were explained breast anatomy, cancer risk factors, early symptoms that need to be watched out for, and SADARI steps according to guidelines from the Ministry of Health. (Fitryesta, 2016).

In addition, a participatory approach is also used in this activity with the hope that participants will receive information and play an active role in disseminating this knowledge to their families and surrounding environment (Tira *et al.*, 2025). It is hoped that this education can raise awareness of the importance of early examination and become a sustainable preventive step in reducing the incidence of breast cancer in rural communities. (Nuraini *et al.*, 2025).

With this activity, it is expected that women of childbearing age in Dusun Pengaingan have an adequate understanding and skills in detecting breast abnormalities independently. SADARI education and training are important investments in building a healthy lifestyle culture and are genuine efforts in reducing the risk of late breast cancer diagnosis in the future.

METHOD AND PROCEDURES

This community service is carried out through educational activities and direct practical training aimed at improving the knowledge and skills of women of childbearing age in conducting Self-Breast Examination (SABE) as a step for early detection of breast cancer. The approach used is participatory-educational, where participants not only receive information passively but are also actively involved in discussions and training practices.

1. Time and Place of Implementation

This activity will be held from October 10 to December 14, 2024, at Madrasah Diniyah Al Munawaroh, Pengaingan Hamlet, Bangkalan District. This location was chosen based on the results of identifying community needs and the low level of understanding regarding the early detection of breast cancer.

2. Subjects and Participants

Participants in this activity consist of:

- a. Students of Madrasah Diniyah Al Munawaroh who have entered adolescence are considered in the early range of women of childbearing age.

- b. Mothers from Penganingan Hamlet who are included in the category of women of childbearing age (15–49 years), both married and unmarried

Participants who attended numbered around 50 people, with various educational backgrounds and levels of understanding about reproductive health.

3. Activity Stages

The activities are carried out in several stages as follows:

- a. Initial Observation and Needs Survey

Prior to implementation, observations and a short survey were conducted with residents and administrators of Madrasah Diniyah to find out:

- 1) Level of understanding about breast cancer
- 2) Frequency and knowledge about how to do BSE
- 3) Need for women's health education
- 4) This survey was conducted using a simple questionnaire and informal interviews with community representatives.

- b. Educational Counseling

Counseling is conducted interactively using PowerPoint presentation media, leaflets, and educational videos. The materials presented include:

- 1) Understanding breast cancer and the importance of early detection
- 2) Risk factors and early symptoms of breast cancer
- 3) Steps to perform BSE according to the menstrual period
- 4) Myths and facts about breast cancer
- 5) Counseling is packaged in easy-to-understand language, prioritizing a local cultural approach to make it more acceptable.

- c. SADARI Practical Training

- 1) After the counseling, participants were invited to practice the BSE steps directly using educational breast dolls prepared by the service team. Health workers (lecturers and nursing students) guided this practice with direct demonstrations and corrections.
- 2) Participants were also given a BSE guide leaflet to take home and repeat independently.

- d. Discussion and Q&A

An open Q&A session was conducted to discuss participants' questions. The discussion was directed to explore participants' experiences and challenges in recognizing early symptoms of breast cancer.

- e. Activity Evaluation

Evaluation is carried out using two methods:

- 1) A simple pre-test and post-test were used to assess the increase in participants' knowledge about BSE and breast cancer.

2) Observation of skills during practice to assess participants' understanding of performing BSE correctly.

4. Instruments and Media Used

- a. Audio-visual media (BSE educational video)
- b. Simulation breast doll
- c. BSE guide leaflet
- d. Pre-post test questionnaire
- e. Practice observation sheet

5. Data Analysis

The pre-test and post-test results were analyzed descriptively to see the increase in participants' understanding. Qualitative data from the discussion were also analyzed to see the community's response to the importance of early detection of breast cancer.

RESULTS OF ACTIVITIES AND DISCUSSION

Implementation of Activities

The implementation of this program was carried out through a series of structured stages designed to ensure the achievement of its objectives effectively. Initial activities included preparation and coordination with relevant stakeholders to identify the needs and expectations of the participants. This was followed by the provision of materials and practical guidance tailored to the participants' level of understanding, ensuring the transfer of knowledge could be well received. All activities were documented and monitored to evaluate the progress and outcomes, providing a strong foundation for analyzing the results and discussing the implications in the following section.

Table 1. Implementation of Community Service Activities

No	Date	Activity	Description	Implementat ion Method	Outputs
1	October 10, 2024	Initial Socialization and Coordination with Madrasah and Community Leaders	Permits, scheduling, and introduction of activity objectives to the community and local figures	Presentation, group discussion	Full support from local figures and active community participation
2	October 17, 2024	BSE Knowledge Pre-test	Measuring participants' initial knowledge about breast cancer and the importance of early detection through SADARI	Questionnair e	Initial data for evaluating participants' knowledge improvement
3	October 24, 2024	Theory of Education: Introduction to Breast Cancer and Early Detection	Provides a basic understanding of breast cancer, risk factors, and the importance of early detection.	Lecture, PowerPoint	Participants understand the basic concepts of breast cancer

No	Date	Activity	Description	Implementat ion Method	Outputs
4	October 31, 2024	SADARI Practical Training	Demonstration of the correct SADARI steps using visual media and aids	Live simulation	Participants can practice SADARI independently and correctly
5	November 7, 2024	Individual/group mentoring	Providing opportunities for direct practice with assistance from the implementation team	Consulting, private practice	Form a habit of regular BSE
6	November 21, 2024	Advanced Education and Q&A	Deepen understanding and answer participants' doubts during the training process.	Interactive, Q&A	Participants' understanding increases, and their self- confidence increases
7	December 5, 2024	Post-test Knowledge and Practice Evaluation	Post-test Knowledge and Practice Evaluation	Questionnair e, practice observation	There is a significant improvement in the pre-test and practice results.
8	December 12, 2024	Sustainability Planning Reflection, Feedback, and Discussion	Accommodate participant suggestions, evaluate activities, and prepare plans for the sustainability of SADARI education.	Discussion, open interview	Formation of health cadres or ongoing training plans
9	December 14, 2024	Closing and Distribution of Certificates	End the activity with appreciation to participants and documentation of the activity.	Ceremonial, documentatio n	Participants feel appreciated and motivated to continue practicing SADARI

The implementation of this community service activity showed significant results in increasing the knowledge and skills of participants regarding the early detection of breast cancer through the SADARI technique. This activity targeted two main groups, namely Madrasah Diniyah Al Munawaroh students and mothers in Pengaingan Hamlet, Bangkalan District.

Before the training began, a pre-test was conducted to measure the participants' initial knowledge of breast cancer and how to perform SADARI. The pre-test results showed that most participants did not understand the importance of early detection and did not know how to perform breast examination independently (Rahayu *et al.*, 2025).

After direct education and training, participants were given a post-test, including delivering educational materials, interactive discussions, and demonstrations of BSE practices with visual educational media and anatomical dolls. The post-test results showed increased understanding and skill scores in almost all participants from the adolescent and mother groups.



Figure 1. Implementation of SADARI Education

Some important points from the results of the activity:

1. Increased Knowledge: Only about 30% of participants had heard of the term BSE before the activity. After the training, more than 85% of participants could correctly mention the stages of BSE.
2. Increased Skills: Based on demonstrations conducted by the facilitator team, more than 70% of participants could practice BSE with the appropriate stages.
3. Changes in Attitude: There were positive changes in attitude, such as the emergence of awareness of performing BSE routinely every month and spreading this knowledge to family and the surrounding community.
4. Level of Participant Satisfaction: Based on the final questionnaire evaluation, 95% of participants stated they were delighted with the activity, the material was easy to understand, and the delivery method was interesting.

These results show that a participatory educational approach involving lectures, discussions, and direct practice has proven effective in increasing public understanding and awareness of the importance of early detection of breast cancer.

CONCLUSION

This community service activity has succeeded in increasing the knowledge and skills of women of childbearing age in Pengaingan Hamlet in conducting Breast Self-Examination (SADARI) to detect breast cancer early. The education and training provided have proven effective and have been enthusiastically received by the participants, especially because of the communicative delivery method and direct practice that leaves an impression.

This activity also encourages positive and sustainable changes in health behavior through a participatory and educational approach. It is hoped that this training can be an initial step in reducing the number of late breast cancer detections in rural communities and become an intervention model that can be replicated in other areas. From the activities of Devotion to the community, they must continually add insight and improve skills about early childhood learning and education.

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