

THE RELATIONSHIP BETWEEN KNOWLEDGE AND BREAST SELF-EXAMINATION BEHAVIOR (SADARI)

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ABSTRACT

The high prevalence of breast cancer in Indonesia is caused by late treatment at an early stage. Breast self-examination is an examination that is the cheapest and easiest to do to detect breast cancer early. This study aims to determine the relationship between knowledge and attitudes with breast self-examination behavior (SADARI) in grade 11 students at SMK Negeri 2 Sumedang in 2023. The design of this study is descriptive correlation with a cross-sectional approach. The population in this study was 552 and the sample size in this study was 85 people using the Stratified Random Sampling Technique. Data collection methods in this study using a questionnaire. Data analysis using univariate and bivariate analysis with chi-square statistical tests. The results showed 48 students (56.5%) had sufficient knowledge, and 68 students (80.0%) had unsupportive behavior. From the results of the chi-square test, it was found that there was a relationship between knowledge and SADARI behavior ($p=0.005$). It is expected that the school cooperates with health workers to provide counseling on SADARI to detect early breast cancer.



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1. INTRODUCTION

Breasts are a woman's valuable asset, but are often considered a taboo body part that should not be discussed (Suryono, 2018). Breast cancer is a malignant cancer that often occurs in women in developed countries and second only to cervical cancer in developing countries, and constitutes 29% of all cancers diagnosed each year (Kartini, 2019). Along with the times, the number of breast cancer patients in Indonesia is increasing. Initially breast cancer attacks women who are over 30 years old but currently the age of breast cancer sufferers is becoming a younger woman or teenager (Fres, 2015). Based on the findings of breast cancer patients at a young age, that not a few teenage girls aged fourteen years suffer from tumors in their breasts, where tumors that occur can cause breast cancer if not detected early. Although not all of them are malignant, it shows that there is a trend of higher breast cancer symptoms in adolescence. The specific cause of breast cancer is still unknown, but many factors are thought to have an influence on the occurrence of breast cancer, including age, age at first menstruation, history of breast cancer, unhealthy lifestyle (consuming instant food and drinking alcoholic beverages) (Mulyani and Rinawati 2013).

Based on the WHO report (2019), breast cancer is the most common cancer among women, affecting 2.1 million women each year and is also the cause of the largest number of cancer-related deaths among women. In 2018, an estimated 627,000 women died from breast cancer, which is about 15% of all cancer deaths among women (WHO, 2019).

In Indonesia, the prevalence of cancer in Indonesia is quite high. Data presented by the Directorate General of Disease Prevention and Control of the Ministry of Health of the Republic of Indonesia (2019) that the incidence rate of cancer in Indonesia (136.2/100,000 population) is ranked 8th in Southeast Asia, while in Asia it is ranked 23rd. The highest incidence rate in Indonesia for men is lung cancer, which is 19.4 per 100,000 population with an average mortality of 10.9 per 100,000 population, followed by liver cancer at 12.4 per 100,000 population with an average mortality of 7.6 per 100,000 population. While the highest incidence rate for women is breast cancer, which is 42.1 per 100,000 population with an average mortality of 17 per 100,000 population, followed by cervical cancer at 23.4 per 100,000 population with an average mortality of 13.9 per 100,000 population.

According to the 2018 Indonesian Health Profile, West Java is in the first position with the highest number of breast cancer patients compared to Central Java with 4,141 breast cancer patients, and 149 suspected breast cancer with early detection. This number increased compared to 2016 which only amounted to 452 people while those suspected of breast cancer with early detection were none (Ministry of Health RI, 2019).

In Sumedang district, from the data of the Sumedang Health Office (2022), data were obtained regarding the number of results of puskesmas examinations from early detection, namely a total of 1132 people were examined, there were tumors / lumps 3 people, suspected cancer 1 person, breast abnormalities 12 people and referred 12 people. For breast cancer patients themselves there are none.

Early detection is the first and most important step in cancer prevention. Early detection is expected to reduce mortality and morbidity rates, and health costs will be lower. Early detection and screening are the key to high survival rates in patients (Saputra, 2021). Early detection can reduce mortality. In addition, to improve the recovery of breast cancer patients, the key is early discovery, early diagnosis, and early therapy. For this reason, it is necessary to disseminate knowledge about breast cancer, and education to do SADARI (Kemenkes RI, 2018).

Breast self-examination (SADARI) can be done by women since they feel the growth of their breasts with the aim of getting used to examining their breasts early on in addition to being a means of early detection of breast cancer, because by conducting early examinations breast cancer can be prevented from a higher risk, and can reduce mortality at an early stage will provide a longer life expectancy (Kartini, 2019). Doing SADARI can reduce the mortality rate caused by breast cancer by 20%, but women who do SADARI are still low at 25% - 30%. The SADARI technique is very easy to do but many women do not know this method and there are still many who do not care and are sensitive to abnormal symptoms in their breasts. It is also caused by lack of information and motivation to get information about prevention and early detection of breast cancer (Anggrayni, 2017).

Based on the results of previous research conducted by Friska Wulandari with the title of the relationship between the level of knowledge and attitudes with the behavior of female students' breast self-examination (SADARI), it shows that there is a relationship between knowledge ($p = 0.000$) with the behavior of PGSD students of STKIP Muhammadiyah kuningan, West Java province. The existence of information provided by health workers about SADARI can affect a person's attitude, a lack of attitude can be caused by emotional factors and an individual who is less responsive to SADARI.

From the results of preliminary studies conducted by researchers on Monday, April 3, 2023 conducted by interviewing ten female students at SMK Negeri 2 Sumedang. Then the results obtained 6 (60%) of 10 female students have sufficient knowledge about breast cancer, 4 (40%) of 10 female students take awareness actions but do not do it regularly, 7 (70%) of 10 female students do not exercise regularly and often consume unhealthy foods (junk food) . This is very concerning and has an impact on the occurrence of breast cancer.

Based on the data and description above and considering the importance of breast self-examination (SADARI) as an effort to detect breast cancer early and whether there is a relationship between breast cancer knowledge and breast self-examination behavior (SADARI), the researcher is interested in taking research on "The relationship between knowledge and breast self-examination behavior (SADARI) among grade 11 students at SMK Negeri 2 Sumedang".

2. METHODS

The research method used was quantitative research with a Cross Sectional approach. The population in this study were 11th grade students at SMKN 2 Sumedang. The sampling used in this study was Stratified Random Sampling, with a sample size of 85 female students. The instrument used was a questionnaire. Data analysis includes univariate and bivariate analysis using the Chi Square test.

3. RESULTS AND DISCUSSION

3.1. Results

A. Univariate Analysis

1) Knowledge Overview

Table 1 Knowledge of 11th grade students at SMKN 2 Sumedang

Knowledge	Frequency	Percent (%)
Less	27	31,8
Simply	48	56,5
Good	10	11,8
Total	85	100,0

Based on Table 1, it can be concluded that students at the level of knowledge with the highest frequency are in the sufficient category 48 students (56.5%).

2) Overview of SADARI Behavior

Table 2 Overview of SADARI Behavior in Grade 11 Girls at SMKN 2 Sumedang

SADARI Behavior	Frequency	Percent (%)
Not in favor	68	80,0
Support	17	20,0
Total	85	100,0

Based on Table 2, it can be concluded that the majority of female students in SADARI behavior with the highest frequency are in the non-supportive category as many as 68 female students (80.0%).

B. Bivariate Analysis

1) Relationship between Knowledge and Behavior of SADARI

**Table 3 Relationship between Knowledge and SADARI Behavior
11th Grade Girls at SMKN 2 Sumedang**

Knowledge	SADARI Behavior						P Value*
	Not in favor		Support		Total		
	F	%	F	%	F	%	
Less	27	31,8	0	0,0	27	31,8	0,005
Simply	35	41,2	13	15,3	48	56,5	
Good	6	7,0	4	4,7	10	11,7	
Total	68	80,0	17	20,0	85	100,0	

Based on Table 3, the significance result is 0.005, there is a significant relationship between knowledge and breast self-examination behavior (SADARI) in grade 11 students at SMKN 2 Sumedang. With a sufficient level of knowledge with unsupportive SADARI behavior, the highest frequency is 35 students (41.2%).

3.2. Discussion**A. Knowledge Overview**

Based on the results at the level of knowledge with the highest frequency, 48 students (56.5%) were in the sufficient category. Notoatmodjo in 2010 emphasized that there are several ways that can increase the knowledge of female students about breast self-examination, one of which is by providing health education. Through health education about breast self-examination, there will be a transfer of information to female students and they will perceive the information so that the information they have increases and finally their knowledge about SADARI can increase.

The results of this study are supported by previous research which states that WUS about breast self-examination in the sufficient category (32.0%) in performing SADARI. This happens because these young women do not get enough information about SADARI, besides that the surrounding environment is also less supportive to do SADARI.

According to the researchers, information about breast self-examination is not adequately or effectively conveyed, and girls have limited knowledge about the methods and importance of performing the examination. Educational curricula or health programs do not place adequate emphasis on breast self-examination.

B. Overview of SADARI Behavior

An overview of the results of univariate analysis showed the results of SADARI Behavior with the highest frequency, namely in the Unsupportive category, namely 68 female students (80.0%) and a small portion in the Supportive category, namely 17 female students (20%).

The results of this study are not in line with the results of research conducted by Azizah (2017) that adolescent girls at SMA Negeri 1 Kawali who have a supportive behavior towards SADARI behavior as many as 49 people (55.7%). This is due to high self-awareness of breast health. gives a person control over their own health. By doing self-examination, having an active role in early detection and prevention of disease.

According to the researcher, the lack of support for SADARI behavior is due to a lack of knowledge and awareness. There are students who do not have sufficient knowledge about breast self-examination or lack of awareness of the importance of early detection of breast cancer. Lack of accurate information about the procedure and benefits of breast self-examination can make a person unmotivated to do it. Fear and anxiety are also experienced by students, where they are afraid if they find abnormalities or abnormal results, and they are uncomfortable with touching and physical exploration of their own breasts. That's why this anxiety can prevent someone from doing regular examinations.

C. Relationship between Knowledge and Behavior of SADARI

From the results of this study obtained a significance value of 0.005, there is a significant relationship between knowledge and SADARI behavior in female students of SMKN 2 Sumedang. Most with a sufficient level of knowledge and SADARI behavior do not support the highest frequency, namely there are 35 students (41.2%).

According to the Health Belief Model theory put forward by Skinners (2008), this Health Belief Model emphasizes the role of individual beliefs about the severity of disease, susceptibility to disease, the benefits of preventive measures, and the obstacles that may arise in adopting healthy behavior.

- Severity; If a person believes that breast cancer is a serious disease and can adversely affect their life, they may be more motivated to perform SADARI behavior.
- Vulnerability; If a person believes they are susceptible to breast cancer, they may be more likely to engage in SADARI behavior.
- Benefits; If a person believes that SADARI behavior has benefits in detecting breast cancer early and increasing the chances of cure, they may be more motivated to do it.
- Barriers; Barriers may include factors such as fear, concern about undesirable outcomes, or difficulty in accessing health services.

This study is in line with the research of Bunga Sisxa Fefiani (2019) based on the Chi Square test obtained a p-value of $0.001 < \alpha (0.05)$. It is concluded that there is a significant relationship between knowledge and SADARI behavior in female students of SMK NU Unggaran. Because the level of knowledge about Sadari is closely related to Sadari behavior. In line with the theory of Snehandu B. Karr's theory that "Whether or not there is information about health, a person will tend to follow an action if he has a complete explanation of the action he will take." Research that is not in line by Kurniawati (2021) based on the statistical test $p = \text{value of } 0.869 > \alpha (0.05)$, it can be concluded that H_a is rejected, meaning that there is no relationship between the knowledge of adolescent girls and sadari behavior. Because in Notoatmodjo's theory which states that knowledge is an important factor in determining a person's behavior because knowledge can lead to changes in people's perceptions and habits. So that there is a gap between theory and research results because knowledge is not related to awareness behavior and there is no relationship between knowledge and behavior due to other factors such as environmental factors because the environment is all the conditions that exist around the village and its influence that can affect the development and behavior of people or groups and can also be due to social culture because the socio-cultural system that exists in society can influence attitudes in receiving information.

According to researchers, knowledge affects breast self-examination behavior in that the higher a person's level of knowledge about the importance of breast self-examination and how to perform it, the more likely they will perform regular breast self-examination. Good knowledge about the risk of breast cancer, the

benefits of breast self-examination, and the necessary steps can be a motivation for students to adopt this SADARI behavior.

4. CONCLUSIONS

Based on the results of research on the relationship between attitudes and breast self-examination behavior (SADARI) in 11th grade students at SMKN 2 Sumedang, it can be concluded:

1. Most of the students at the level of knowledge with the highest frequency were in the moderate category, namely 48 students (56.5%).
2. Most of the students in the SADARI behavior with the highest frequency were in the Unsupportive category, namely 68 students (80.0%).
3. There is a relationship between knowledge and SADARI behavior in female students of SMKN 2 Sumedang with a significance value of $p=0.005$.

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