

# The Effectiveness of Application of Lectures and Audiovisual Methods on Increasing Conscious Behavior in Cancer Early Detection Efforts Breasts of Housewives in Alue on District Kaway XVI

Suci Annisa, Arfah Husna, Muhammad Iqbal Fahlevi

Fakultas Kesehatan Masyarakat, Universitas Teuku Umar

**Corresponding author** arfah husna, e-mail: arfahhusna@utu.ac.id

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## Abstract

Breast cancer is the type of cancer that causes the biggest cause of death among women as well as the highest number of cases in the world. The number of breast cancer patients in West Aceh in 2017 was 22 people, then decreased to 10 people in 2018, and increased from 10 people to 17 people in 2019. Breast cancer cases increased due to lack of knowledge about BSE behavior, early symptoms caused by breast cancer and breast cancer risk factors. One way to prevent breast cancer is easy, inexpensive, and can be done yourself at home is to use the BSE (Breast Self-Examination) method. The purpose of this study was to determine the effectiveness of the application of the lecture and audiovisual methods before and after the intervention was given regarding the early detection of breast cancer in housewives in Alue on Village, Kaway XVI District. This type of research is a quasi-experimental with a two-group pre-test-post-test approach. The sample is 24 respondents with purposive sampling technique. The analysis used is univariate and bivariate. The results of the Wilcoxon test showed an increase in BSE behavior ( $p = 0.002$ ) in housewives in Alue On village. The results of the t test show that the t-count value is  $2.980 > t_{table} 2.074$ , meaning that there is a difference in the average results of BSE behavior using the lecture and audiovisual methods where the group using the audiovisual method is more effective at increasing BSE behavior in early detection of breast cancer in housewives. Alue On village, Kaway XVI sub-district. It is recommended to mothers who have a good understanding of early detection of breast cancer to provide information to mothers whose understanding is still lacking.

**Keywords:** Lecture Method; Audiovisual Method; BSE Behavior

## Introduction

According to the American Cancer Society (2019), breast cancer is a cancer in which cells start to grow out of control. Cancer is a public health problem in Indonesia, with a prevalence rate of 136.2 per 100,000 population (Kemenkes RI, 2019). The highest incidence of breast cancer with 42.1 cases per 100,000 population in Indonesia is dominated by women (Kemenkes RI, 2019). Until 2017, Indonesia has carried out early detection of breast cancer in 3,040,116 women (2.98%) aged 30-50 years (Kemenkes RI, 2017). In Indonesia, breast cancer has the highest incidence and the leading cause of death for women. Approximately 185,000 women are diagnosed with breast cancer each year. The highest incidence of female breast cancer is 42.1 per 100,000, and the average mortality rate is 17 per 100,000, followed by cervical cancer (Kemenkes RI, 2015).

The high death rate from cancer, especially in Indonesia, is partly due to the limited public understanding of cancer risk, early signs of cancer, cancer risk factors, correct cancer treatment, and a healthy lifestyle. Many cancer patients receive treatment at the wrong place, and only go to medical institutions for a check-up when the cancer is at an advanced stage, so that the cost of treatment becomes more expensive (Indonesian Cancer Foundation, 2012). According to the Indonesian Data and Information Center (2016), the prevalence of cancer in all age groups nationally in 2013 was 1.4%, which is estimated to be 347,792 people.

Cut Nyak Dhien Hospital Information System Report In 2017, the number of breast cancer patients in West Aceh was 22 people, the number of breast cancer patients decreased to 10 in 2018, and the number of breast cancer patients increased from 10 to 17 in 2019 (Cut Nyak Dhien Meulaboh Hospital Medical Record Data, 2020).

In early detection of breast cancer, there are 3 ways, including Breast Self Examination (BSE) or BSE (BSE), Clinical Breast Examination (SADANIS) or Clinical Breast Examination (CBE) and Mammography (Anggraeni and Handayani, 2019). In 2012, the National Breast Screening Program (NBCSP) recommended early detection of breast cancer, namely monthly breast self-examination (BSE) for women aged 18-20. BSE is a simple, inexpensive, and self-managing method (Kemenkes RI, 2015). The BSE method is recommended once a month after menstruation, which is when the breasts are not soft or swollen, because once a month, women are more likely to notice changes in their breasts, thus taking better care of their breast health (NBCF, 2019).

Based on the initial observations made by researchers on 5 housewives from the Alu Oen village on December 9, 2020, the lack of knowledge of these mothers on BSE behavior, they only assumed that breast cancer was a disease caused by frequent consumption of meatballs. None of the mothers knew how the early symptoms of breast cancer were, they were reluctant to go to the hospital and did not want to have the disease checked by a doctor because they were ashamed and considered a family disgrace. The very low level of knowledge about breast cancer makes the people of Alue On village less concerned about it, they only consider breast cancer serious when they feel excruciating pain and pus comes out of their breasts, in such conditions they want to go to the doctor when the disease has reached an advanced stage.

### Method

The research method uses quantitative methods. This type of research is a quasi-experimental with two groups of pre-test and post-test where the first group uses the lecture method, and the second group uses audiovisual media. The population of this study were housewives in Alue On as many as 32 people. The sample in the study was 24 people. Of the 24 respondents, they will be divided into two groups with different treatments, where the first group is 12 respondents using the lecture method, and the second group is 12 respondents using audiovisual media. This research was conducted in Alue on Village, Kaway XVI District, West Aceh Regency.

### Results

The results of research differences in the application of lecture and audiovisual methods

**Table 1.** Distribution of Respondents Based on Knowledge, Attitudes and Behavior of BSE Before and After Application of Lecture and Audiovisual Methods.

Variable	Ceramah Method		Audiovisual Method	
	Pre test	Post test	Pre-test	Post-test
Knowledge	4 (33,3%)	9 (75,0%)	5 (41,7%)	10 (83,3%)
Attitude	3 (25,0%)	8 (66,7%)	4 (33,3%)	11 (91,5%)
Behavior	2 (16,7%)	8 (66,7%)	3 (25,0%)	11 (91,5%)

Based on Table 1, it is known that there is an increase in BSE knowledge, attitudes and behavior after being given the application of the lecture and audiovisual methods. In the pre-test and post-test stages of the lecture method group, respondents who have good knowledge as many as 4 respondents (33.3%) have increased to 9 respondents (975.05). Respondents who have a good attitude as many as 3 respondents (25.0%) have increased to 8 respondents (66.7%). Respondents who have good BSE behavior as many as 2 respondents (16.7%) have increased to 8 respondents (66.7%). In the pre-test and post-test stages of the audiovisual group, 5 respondents (41.7%) who had good knowledge increased to 10 respondents (83.3%). Respondents who have a good attitude as many as 4 respondents (33.3%) have increased to 11 respondents (91.5%). Respondents who have good BSE behavior as many as 3 respondents (8.5%) have increased to 11 respondents (91.5%).

**Table 2.** Application of Lecture and Audiovisual Methods for Housewives

Variable	N	Mean	P-Value
Pre test	12	0,650	0,002
Post-test	12	0,935	0,002

Based on table 2 above, there was a significant increase from the pre test to the posttest stage where the average value of the pre test variable was 0.650, then the posttest variable which experienced an increase was the average value of 0.935. This means that there is a significant increase from the application of the lecture and audiovisual methods to increasing conscious behavior, or in other words the use of lecture and audiovisual methods is effective in increasing conscious behavior to detect breast cancer early in housewives in Alue on Village, Kaway XVI District.

**Table 3.** The Effectiveness of Application of Lecture and Audiovisual Methods on Increasing BSE Behavior in Early Detection of Breast Cancer in Housewives in Gampong Alue on District Kaway XVI



Significance Level	Comparative Test	
	T-test	T-table
$\alpha = 0,05$ $n = 24$	-2,980	2,074

Based on table 3, it can be explained that the 95% (0.05) comparative test of the effectiveness of the application of lecture and audiovisual methods on increasing conscious behavior in an effort to detect breast cancer early in housewives in Alue On Village, Kaway XVI District, showed a significant difference between the test value, where the t test is known that the tcount value is  $2,980 > t_{table} 2,074$  which means there is a difference in the average results of BSE behavior using the lecture and audiovisual methods where the group using the audiovisual method is more effective in increasing BSE behavior in early detection of breast cancer in housewife from Alue On village, Kaway XVI sub-district.

## Discussion

### The Effectiveness of Application of Lecture and Audiovisual Methods on Increasing BSE Behavior in Early Detection of Breast Cancer

Based on the results of the Wilcoxon test, the P-value = 0.002 and this is smaller than = 0.05 (P-value = 0.002 <= 0.05) so that it can be described that there is a significant change from the pre-test stage to the post-test where the pre-test variable has an average value of 0.650, then the posttest variable which has increased with an average value of 0.935. This means that there is a significant increase in the application of the lecture and audiovisual methods to increasing conscious behavior in the early detection of breast cancer in housewives in Alue on Village, Kaway XVI District, or in other words, the use of lecture and audiovisual methods is effective in increasing conscious behavior in early detection efforts. breast cancer in housewives from Alue on Village, Kaway XVI District. Then, an Independent Sample T-test was conducted on 2 samples with different subjects and underwent different treatments, the point is to find out whether there is a significant difference between group 1 and group 2.

Based on the results of the normality test for the two samples, it can be explained that the lecture method obtained a significant value of 0.431 and the audiovisual method obtained a significant value of 0.100. Because the significant value is  $> 0.05$ , it can be concluded that the data is normally distributed.

Therefore, the parametric t test can then be used. In the 95% (0.05) testing of the comparative effectiveness of the application of the lecture and audiovisual methods on increasing conscious behavior in the early detection of breast cancer in housewives in Alue On Village, Kaway XVI District, there was a significant difference between the test values, where the test t test is known that the value of tcount is  $-2,980 > t_{table} 2,074$ , so based on the basis of decision making by comparing the value of tcount with ttable, it can be concluded that  $H_0$  is rejected and  $H_1$  is accepted, which means there is a difference in the average results of BSE behavior using the lecture and audiovisual methods where the group those who use the audiovisual method are more effective at improving BSE behavior than using the lecture method, this is because the lecture method only involves hearing without knowing how the picture is meant, respondents sometimes don't really listen to what the speaker is explaining, the speaker can only explain if there is a special time, the lecture method is also a one-way communication process that tends to make respondents bored quickly, so that the message conveyed by the presenter is easily forgotten for a few minutes.

Mubarak (2012) states that audiovisual media as a medium for conveying health education messages can provide a clearer and more interesting picture. According to Shorea and Agrina (2011) audiovisual media has the properties of the ability to improve perception, the ability to increase understanding, the ability to increase the transfer (diversion) of learning, the ability to provide reinforcement or knowledge of the results achieved, and the ability to increase retention. memory) ears, nose and so on.

In addition, referring to Sulastri's research (2012), the use of video as a medium in BSE health education can increase the knowledge and attitudes of young women in SMA Negeri 09 Balik Papan. Susanti (2013) states that there are differences in the level of knowledge before and after being given health education with the audiovisual method about BSE in women of childbearing age. Based on the results of Ismi's research (2018), there is an influence on the level of knowledge about BSE in women of childbearing age using video media.



Based on the results of research by Masturo et al., (2019) on the audiovisual method, the level of knowledge of respondents increased after being given health education.

The results of this study are supported by research by Yulinda (2018) which shows that there is an increase in the level of knowledge and attitudes towards BSE behavior after being given health education through audiovisual media. This study is also in line with research conducted by Izza (2019) which showed that there was a significant relationship after being given counseling through audiovisual media in increasing knowledge of adolescent girls about the signs and symptoms of breast disorders. The results of Suci's (2020) research on Breast Self-Examination (BSE) using audio-visual media as an effort to detect early breast cancer have increased the knowledge, attitudes, and skills of young women at Darul Quran Middle School. Tiara (2017) mentions that there is also an effect of providing health counseling with video media on the level of BSE knowledge at SMK YJM Ciputat.

Dena (2015) health counseling on BSE examination with video is very effective in increasing knowledge. The results of research by Farah et al., (2015) prove that audiovisual media is more effective in increasing students' knowledge about TB. Diah (2017) There are differences in the effectiveness of breast self-examination counseling with audiovisual media on changes in BSE practice. This research is in line with the research of Kusila et al., (2020) that the audiovisual media education package has proven to be effective in increasing adolescent knowledge about BSE.

## Conclusion

There was a significant increase from the application of the lecture and audiovisual methods to increasing conscious behavior with a value of 0.650 to 0.935 to detect breast cancer early in the housewives of Alue on Village, Kaway XVI District. The results of the Wilcoxon test showed an increase in BSE behavior ( $p = 0.002$ ) in housewives in Alue On village. The results of the t test showed that the tcount value was  $2,980 > t_{table} 2,074$ , which means that there is a difference in the average results of BSE behavior using the lecture and audiovisual methods where the group using the

audiovisual method is more effective in increasing BSE behavior in early detection of breast cancer in gampong housewives. Alue On, Kaway XVI sub-district.

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## Author Contribution and Competing Interest

The author's contribution in this research is involved in designing research projects, collecting data or analyzing results, involved in the preparation or revision of scientific papers.

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