

# The Effect of Demonstration Method on Breast Self-Examination in Young Women at SMAN 1 Telaga Biru

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**Abstract.** *This research was conducted at SMAN 1 Telaga Biru. The aim was to determine the effect of the demonstration method on breast self-examination in adolescent girls. This research method used an experimental design with a pre-experimental one group pre-test-posttest design. The sample in this study were 56 respondents. Data analysis used the Wilcoxon sign rank test. The results showed that Pvalue = 0.000 which means it is smaller than = 0.05. Thus, there is a difference between breast self-examination conducted by young women before and after being given the demonstration method. It is said that there is an effect of the demonstration method on breast self-examination in adolescent girls at SMAN 1 Telaga Biru.*

**Keywords:** *Youth, BSE, Demonstration*

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## INTRODUCTION

One of the diseases that are very worrying for women related to the breast is breast cancer (ca mammae). Many women do not realize that they have breast cancer, even though breast cancer is a serious disease (Mufida, 2015). Breast cancer is one of the most common types of cancer in women. Breast cancer is a malignant tumor that grows in breast tissue (Gusti, 2018).

Data from the World Health Organization (WHO, 2014), the incidence of cancer increased from 12.7 million cases in 2008 to 14.1 million cases in 2012, while the number of deaths increased from 7.6 million people in 2008 to 8.2 million in 2012. The prevalence of tumor/cancer in Indonesia is 1.4 per 1000 population or about 330,000 people. The incidence of breast cancer in women in Indonesia is 40 per 100,000 women (Rikesdas, 2013).

Data from the Gorontalo Provincial Health Office, it was found that in 2017 of 1,513 women who checked themselves, 21 of them were detected as having lumps in the breast.

Meanwhile, in 2018, out of 1,816 people, there were 20 people who had breast lumps (Gorontalo Provincial Health Office, 2018).

The Indonesian government has launched a movement for the prevention and early detection of cancer in Indonesian women which has been carried out since 2015 (KEMENKES 2015). The priority of the early detection program in Indonesia is for women with a target of 50% by 2019. This activity aims to increase public awareness in controlling risk factors and early detection of cancer. This movement is a series of activities including promotive, preventive, early detection and follow-up activities.

Theoretically the cause of breast cancer is not known with certainty, but there are several risk factors for breast cancer, including internal and external factors. Internal factors are family history, the influence of excessive estrogen hormone, menstruation too early, not married, not breastfeeding and late menopause. External factors include poor diet, smoking, drinking alcohol and pollution. However, practically it is due to limited public knowledge about the dangers of cancer, early signs of cancer, risk factors for cancer, how to deal with it properly and getting used to a healthy lifestyle. Not a few of those who get cancer, come for treatment in the wrong place and only check themselves at health care facilities when the stage is advanced so that the cost of treatment is more expensive (Tri, 2018).

The causes of cancer above, breast examination is an important part in improving the health of each individual. The examination can help identify problems before experiencing symptoms and provide opportunities for early treatment or prevention (Syafitri, 2017). BSE examination (breast self-examination) that is carried out regularly can reduce the risk factors for breast cancer.

Breast self-examination (BSE) is the development of a woman's concern for the condition of her breasts. This action is equipped with special steps to detect breast disease early (Syafitri, 2017). Rohmawati & Kholifana (2016) BSE (Breast Self-Examination) is an attempt to detect breast cancer at an earlier stage (down staging). One of the effective ways in the prevention or early detection of breast cancer. BSE is very easy, and can be done at home by teenagers. Teenagers simply do BSE for a few minutes, once a month after menstruation, which can be the first step to detect abnormalities in the breast. BSE can be done by women since they feel the presence of breast growth with the aim of getting used to breast health from an early age other than as a means of early detection of breast cancer. Because by doing an early examination, breast cancer can be prevented from a higher risk. BSE is recommended for women aged 20 years to be carried out every 3 months so that cancer can be detected early.

Knowledge of students is needed in improving health. In this case, the demonstration method is a way to show understanding, ideas and procedures about something that has been carefully prepared to show how to carry out an action, scene using props (Rohmawati & Kholifana, 2016). According to Suliha in Gusti (2018), where the advantages of the demonstration method are that it can make the learning process clearer and more concrete, it is easier to understand something, more interesting, students are stimulated to observe, adapt theory to reality and can do it themselves. This allows a person to detect cancer at an early stage that is less than optimal. Thus contributing to higher cancer morbidity which will ultimately require more extreme medical intervention.

Early detection of breast cancer by doing BSE is contained in the Qur'an Surah Yunus verse 57: Which means: O mankind, indeed there has come to you a lesson from your Lord and a cure for diseases (which are) in the chest and guidance and mercy for those who people who believe. (Surah Yunus .57).

The verse explains that humans are expected to take care of their health before getting sick (preventively), then after that Islam recommends treatment for anyone who needs treatment when sick. This is one of the nature of being human.

Preliminary study conducted on April 15, 2019, interviews were conducted with 10 students, the results obtained from 10 students that knowledge about BSE is very lacking, 7 of them do not know what BSE is at all while 3 other people already know but have never done it. In addition, they have not received information either from the health agency or from the school itself, nor has anyone conducted research on BSE itself. Given the low level of BSE skills in female students, it is very important to carry out reproductive health health education, especially about BSE

## METHODS

The research design used in this study was a pre-experiment one group pre-test-post-test. The location of the research was carried out on August 30 – September 02, 2019 which was located at SMAN 1 Telaga Biru. The population in this study was 283 young women. The sample in this study amounted to 56 people. Sampling in this study using simple random sampling. Data analysis in this study used a non-parametric test, namely the Wilcoxon Signed Rank Test.

## RESULTS AND DISCUSSION

### Characteristics of Respondents

Differences in individual conditions such as age often affect the knowledge of young women about breast self-examination. The age of the youngest respondent at the time of the study was 16 years old while the age of the oldest respondent was 19 years old. The following is the distribution of respondents' characteristics by age at SMAN 1 Telaga Biru, Limboto District, Gorontalo Regency, which can be seen clearly in the table and the following:

Table 1. Distribution of respondent characteristics by age at sman 1 Telaga Biru

Age (Years)	(n)	Percentage (%)
16-17	34	60.7
18-19	22	39.3
<b>Total</b>	<b>56</b>	<b>100</b>

Source: Processed Primary Data (2019)

Based on table 1. shows that from 56 respondents it is known that as many as 34 (60.7%) adolescents aged 16-17 years and as many as 22 (39.3%) adolescents aged 18-19 years. The age limit for adolescents according to the Ministry of Health of the Republic of Indonesia and the National Population and Family Planning Agency is between the ages of 10 to 19 years and not married.

## Univariate Analysis Results

Univariate analysis was conducted to describe and see the description of breast self-examination before and after the demonstration method was given. Univariate data analysis was carried out using the SPSS (statistical product and service solution) program and presented in tabular form.

Distribution of Respondents Based on breast self-examination before being given the demonstration method. The distribution of respondents based on breast self-examination before being given the demonstration method is shown in table 2 :

Table 2. Distribution of sample characteristics based on breast self-examination before being given the demonstration method at sman 1 Telaga Biru

<b>Breast Self-Examination Before Giving Demonstration Method</b>	<b>(n)</b>	<b>Percentage (%)</b>
Doing well	14	25
Not good	42	75
<b>Total</b>	<b>56</b>	<b>100</b>

Source: Processed Primary data (2019)

Based on table 2 above, before being given the demonstration method, it was found that from 56 samples it was found that the majority of students did breast examinations in the unfavorable category, namely 42 (75%) students and those who did breast examinations with good categories were 14 (25%) students.

Distribution of Respondents Based on breast self-examination after being given the demonstration method. The distribution of respondents based on breast self-examination after being given the demonstration method is shown in table 3:

Table 3. Distribution of sample characteristics based on breast self-examination after being given a demonstration method at sman 1 Telaga Biru

<b>Breast Self-Examination After Giving Demonstration Method</b>	<b>(n)</b>	<b>Percentage (%)</b>
Doing well	40	71.4
Not good	16	28.6
<b>Total</b>	<b>56</b>	<b>100</b>

Source: Processed Primary Data (2019)

Based on table 3, after being given the demonstration method, it was found that from 56 samples it was found that the majority of students carried out breast examinations well, namely 40 (71.4%) students and those who did breast examinations were in the poor category. there are 16 (28.6%) students.

## Bivariate Analysis Results

Bivariate analysis was conducted to determine whether or not the demonstration method had an effect on self-breast examination (aware) in adolescent girls at SMAN 1 Telaga Biru, Gorontalo Regency. Statistical data analysis was carried out using the Wilcoxon test, using the SPSS (statistical product and service solution) program. The effect of the demonstration method on breast self-examination (aware) in adolescent girls. The effect of the demonstration method on breast self-examination in adolescent girls (aware) at SMAN 1 Telaga Biru is presented in table 4:

Table 4. The effect of the demonstration method on breast self-examination in adolescent girls at sman 1 Telaga Biru.

<b>Criteria Knowledge</b>	<b>n</b>	<b>Mean</b>	<b>SD</b>	<b>Median (Min-Max)</b>	<b>Z</b>	<b>Pvalue</b>
Pre test	56	73.6	11.3	70 (53-100)		
Post Test	56	85.1	12.1	90 (57-100)	-4.946	0.000

Source: Processed Primary Data (2019)

From the results of data analysis, it shows that there is a change in the value between breast self-examination by young women before and after being given the demonstration method. as much as 85.1.

Based on the results of data analysis using the Wilcoxon test, it was obtained that P value = 0.000 which means it is smaller than = 0.05. Thus, there is a difference between breast self-examination conducted by young women before and after being given the demonstration method. In this case, it is said that there is an effect of the demonstration method on breast self-examination (aware) in young women at SMAN 1 Telaga Biru.

### **Breast Self-Examination Before Giving Demonstration Method**

Based on the results of the study, before being given the demonstration method, it was found that from 56 samples, it was known that the majority of students did breast examinations in the poor category, namely 42 (75%) students and 14 (25%) students did breast examinations in good category.

The results showed that the majority of female students did not perform breast examinations well. Based on the results of the study, students who did breast examinations poorly were students in class IX and class X. In class IX and X students were teenagers aged 16 to 18 years, while students who did breast examinations well were students in class XII where these students 19 years old. Based on this, increasing age can affect the increase in knowledge because increasing age also increases the knowledge it has. The knowledge he has will be obtained from the experience of oneself or others. Although at the age of 16 to 18 years, they have been exposed to print and electronic mass media, but not all respondents are able to receive information properly so that it affects their level of knowledge.

This is supported by Hawari (2014), in his statement saying that if age is associated with knowledge about breast self-examination, the older you get, the more experience the students have, the more information they get, and the more they understand about BSE.

There are also students who perform breast examinations with a good category, namely as many as 14 (25%) students. Based on the results of the interview, it is known that they have good knowledge about breast self-examination (BSE) because the students themselves have knowledge from what they see in the pictures in the UKS room.

According to Utami (2014), image media is one form of teaching media which includes the type of visual media, which is known to have the greatest influence on students among other types of media. Utilization of image media means that image media can be used in the learning process. In addition, image media has the same important position as the teacher, because image media is an integral part of teaching.

The results of this study are in line with the results of previous research conducted by Rosyada (2014), where in his research the results obtained for the pre-test value of all respondents who were unable to perform breast self-examination. Of the 37 women studied, the most respondents who were unable to carry out a conscious examination were respondents who had a high school education with a young age of 20-25 years as many as 19 people (51.3%).

Based on the description above, it is known that age and level of knowledge are closely related. Where a person's age affects the perception and mindset of a person. The older he gets, the more his grasping power and mindset will develop, so the knowledge he gets is getting better

### **Breast Self-Examination After Giving the Demonstration Method**

Based on the results of the research above, it shows that there is a change in the value between breast self-examination by young women before and after being given the demonstration method. as much as 85.1.

This study proves that the demonstration method can increase one's knowledge because it is a learning related to direct action without having to remember the description of what will be demonstrated. In a demonstration process always shows three main components, namely the message sender component (educator/teacher), the message receiver component (students), and the message component itself which is usually in the form of action as learning material. The giver of the message here also affects knowledge, meaning that if the material or message conveyed by the teacher (educator) cannot be accepted by the student, then the student as the recipient of the message misunderstands the content of the message conveyed.

The results of the study are supported by Notoatmodjo (2014) which explains that someone who gets more information will increase knowledge about something that is non-formal. Information can be obtained both from other people and from various mass media, the more information that enters the more knowledge is obtained and vice versa. In addition to external factors, internal factors that affect knowledge are age where the more old you are, the level of maturity and strength of a person will be more mature in thinking and working.

The results of this study are in line with the results of Nurliana's research (2018), where the research results obtained after being given health education with the demonstration method showed 6 people (20%) who had sufficient attitudes and as many as 24 people (80%) had good attitudes.

So it can be seen that the demonstration method is basically an activity or effort to convey messages through concrete actions to a group of people or individuals with the hope that with this demonstration method, someone will gain knowledge, especially about better breast self-examination which in the end is expected to influence on the behavior of the students themselves in detecting their health problems.

### **The Effect of the Demonstration Method on Breast Self-Examination in Young Women at SMAN 1 Telaga Biru**

Analysis of the data using the Wilcoxon test obtained P value = 0.000 which means it is smaller than = 0.05. Thus, there is a difference between breast self-examination conducted by young women before and after being given the demonstration method. In

this case it is said that there is an effect of the demonstration method on breast self-examination in adolescent girls at SMAN 1 Telaga Biru

From the results of data analysis, it shows that there is a change in the value of breast self-examination by adolescent girls before and after being given the demonstration method. Prior to the demonstration, the majority of respondents who performed breast examinations were in the poor category, namely 42 people and 14 respondents who could perform breast self-examination well. After being given a demonstration, as many as 40 respondents were able to do breast self-examination and had very good results.

This proves that the information provided is well conveyed to students, resulting in a significant increase in the number of students who do not know to know about breast self-examination through the provision of material and discussion by means of the demonstration method.

The results of the study, supported by Muninjaya (2014), where the demonstration method is the addition of a person's knowledge and abilities through real learning practice techniques or instructions with the aim of changing or influencing human behavior both individually, in groups and in society to increase awareness of the value of health so that by consciously want to change their behavior into a healthy lifestyle.

In addition, from the results of the study, after being given a demonstration, it was also found that 16 respondents who could not perform breast self-examination well in this case were in the poor category. Based on the results of observations during the research, this is because the concentration and understanding of students in listening to the demonstration is still low, which in the end the student finds it difficult when asked to repeat what has been demonstrated or demonstrated previously.

The results of the study, supported by Mulyana (2016) in his statement said that understanding is that individuals receive and understand information obtained from learning. One of the best ways to remember material throughout our lives is to take the time to study it. Because understanding is gained through attention. However, individuals need a certain amount of energy expended to pay attention or focus on an object. However, the energy of each person is different so that one's attention to the object itself is also different and this will affect the individual's own perception of an object.

The results of this study are in line with the results of previous research conducted by Safitri (2018), which shows the results of the Wilcoxon test for the level of student knowledge obtained by a p-value of  $0.00 < 0.05$ , then  $H_0$  is rejected, meaning that there is a difference in the level of knowledge before and after being given. Health education Realize by demonstration method.

Based on the description above, it can be concluded that the process of knowledge formation begins when information is captured through the perception process and then stored and displayed again through memory. Adolescents adapt to the information they receive in two ways, namely assimilation and accommodation. Assimilation is incorporating new information into existing knowledge, while accommodation is adjustment to new information. The more information, the more knowledge and insight of the youth themselves. If adolescents do not get knowledge about BSE, then the disease cannot be detected early

## CONCLUSION

Based on the results that have been described previously, the researchers conclude the results of the study are as follows: Before being given the demonstration method, it was found that from 56 samples, it was known that the majority of students did breast examinations in the poor category, namely 42 (75%) students and 14 (25%) students did breast examinations in good category. After being given the demonstration method, it was found that from 56 samples it was found that the majority of students did breast examinations well, namely 40 (71.4%) students and 16 (25%) students who did breast examinations in the poor category. Based on the results of data analysis using the Wilcoxon test, it was obtained that P value = 0.000 which means it is smaller than = 0.05. Thus, there is a difference between breast self-examination conducted by young women before and after being given the demonstration method. In this case it is said that there is an effect of the demonstration method on breast self-examination in adolescent girls at SMAN 1 Telaga Biru. As a comparison, to find out the effectiveness of students' abilities in carrying out breast self-examinations for young women at SMAN 1 Telaga Biru.

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