

The Influence of Booklets and Videos on the Ability to Practice Breast Self Examination in Students of High School 4 Gorontalo

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Abstract

Individual awareness in taking actions properly BSE is influenced by the individual understanding of breast cancer, so health promotion Efforts are Necessary. Videos and booklets are some alternative health promotion media. The research objective was to determine the effect of booklets and videos on the ability to practice breast self-examination on students at High school 4 Gorontalo . The research used the Pre-Experiment method with a one-group pretest-posttest design, Carried out in August-October 2019 at High school 4 Gorontalo . The research sample was 60 female students from a population of 119 students using the purposive sampling technique. Statistical test using Paired t-test. The results of the analysis of the different test on the ability of Breast Self Examination (BSE) before and after reading the booklet showed that there was a difference in BSE ability with $p\text{-value} = 0.001$, while before and after watching the video showed that there was a difference in BSE ability with $p = 0.001$ ($p < 0.05$). This study concluded that there was an increase in the students' BSE practice skills after reading booklets and watching BSE videos at High School 4 Gorontalo. It is hoped that students can increase their knowledge and apply BSE so that the incidence of breast cancer or breast disorders can be prevented and detected early.

Keywords: *Booklet, Video, Practice BSE, Students*

Introduction

Data Basic Health Survey in 2018 showed that the prevalence of breast cancer in Indonesia was 0.5 per 1,000 women.¹ The high prevalence of breast cancer in Indonesia must be observed by preventive efforts through early breast self-examination (BSE). Detection of early holding function is significant because of the earlier discovery of breast cancer, the more convenient treatment, and the good results of the rise in breast cancer.

The American Cancer Society (ACS) supports the use of BSE in women 20 years of age or older. Along with the time the disease has begun to lead to age is younger, the age of puberty (13-20 years) often need

to conduct breast self-examination is a routine as early prevention and detection efforts.²

Knowledge of individuals doing BSE activities to be better influenced by understanding people about breast cancer so that attempts to improve wellness need to be made. The effectiveness of the promotion of health is decided by the use of the right of the media, which will promote the distribution of information, achieve the purpose that more and be able to stimulate a message that has been received from others.³

Video and booklet are several alternative media marketing events. The findings of Susanti's (2015) research clarified that the average experience and attitudes of adolescents using video media was higher compared to the teaching process. Media video provides a stimulant to pe n rumor and vision so that the effects have been reached throughout.⁴

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Video is a medium that incorporates the media's point of view and hears so that there is a lot of sensories that used to be increasingly powerful and transparent. . The use of video on BSE can clarify the picture of an abstract about the importance of examination of the breast itself, because in the process of giving respondents not only hear the material that is being presented, but also see it directly and clearly about the steps to realize through the video of the.⁵

Research by Astuti (2017) has shown that offering advice by the use of a booklet will enhance the mother's awareness and ability to execute the BSE technique correctly.⁶ The number of young women in the City of Gorontalo (12-18 years of age) is 13,168. The highest in Central City is 1,877 inhabitants, while the City of East is 1,838 inhabitants, Dungingi 1,614 inhabitants and the lowest is Hulontalangi 1,119 inhabitants.⁷

The Center for Information and Counseling Health Reproductive Youth (CI-CHRY) is one of the government programs that Family Planning Programs has run through the provincial, district, sub-district, village, university high school, high school, middle school, and elementary school. CI-CHRY-run of, by, and for adolescents that are useful for providing service information and Health fertility therapy is ta preparation of family planning.⁸

High school 4 Gorontalo is one of the schools located in the northern town of Gorontalo City. The number of students at High school 4 Gorontalo is 635, consisting of 279 students and 356 female students. High school 4 Gorontalo has 3 classes that have discovered that class X has 137 students, class XI has 119 students and class XII has 100 students.

The goal of the research is to determine the impact of Booklet and Video Against Abi Ladies Doing BSE Practice on students.

Methods

Research is using the method Pre-Experiment with the design of the pre-test control group-post-test design for each intervention was carried out in High school 4 Gorontalo during the month from August to October 2019. Independent variables were booklets and videos, while BSE abilities were the dependent variable. The population in the sample is student class XI High school 4 Gorontalo many as 119 students with sample 60 students using the technique of purposive sampling.

The methods used are check-list sheets, media booklets, and videos. This study compared the impact of booklets and videos on the functional capabilities of BSE. Booklets were distributed to 30 respondents to be read for 30 minutes every day for 5 days, and videos were given to 30 respondents to watch for 30 minutes every day for 5 days. Booklet and video circulated by researchers and sponsored by enumerators. A brief was given to all respondents before the study started.

Multivariate analysis conducted to assess the impact of an independent variable (Booklet and video) with variable bound (Skills BSE) is combined with adding variable outside is important in the bivariate analysis. Modeling was carried out to see which variables affected students' BSE skills. Study of the multivariate use of statistical regression logistic to see the importance of OR and CI 95 percent at the level of significance of $p < 0,05$. Health Research Committee on ethics

Health Research Ethics Commission (HREC) Politechnic Gorontalo Ministry of Health has approved this research by number LB.01.01/KEPK/07/2019.

Results

Table 1. Differences in the ability of BSE before and after the booklet'

Variable	Mean \pm SD (gr / dl)	p-value
Ability early BSE Pre	0.110 \pm 0.080	0,000
Skills BSE Post	1.498 \pm 0.399	
Δ Change	1.388 \pm 0.398	

* Test paired t-test

The average BSE ability before and after the intervention to read the booklet showed an increase in the respondents' ability to do BSE. Ability BSE respondents experienced an increase of 1,388 after reading the booklet. The results of the analysis of the different tests on the ability of BSE before and after reading the booklet showed that there was a difference in BSE ability with a value of $p = 0.000$ ($p < 0.05$) (Table 1).

Table 2. Differences in the ability of BSE before and after the video		
Variable	Mean \pm SD (gr / dl)	p-value
Ability BSE Pre	0.076 \pm 0.056	0,000
Skills BSE Post	1.619 \pm 0.338	
Δ Change	1.542 \pm 0.337	

* Test paired t-test

The average BSE ability before and after the intervention giving the video showed an increase in the respondents' ability to do BSE. Ability BSE respondents experienced an increase of 1,542 after watching the video. The results of the analysis test of difference to the ability of BSE before and after watching the video shows that there are differences in the ability of BSE with a value of $p = 0,00$ ($p < 0.05$) (Table 2).

Discussion

Based on the results of the study showed that after the booklet was read by students, the ability to perform BSE has increased, as many as 70% with average ability BSE amounted to 1,498 and the average gap increase before and after reading the booklet is 1.388. Statistical test results with Paired t-test p-value value = 0.001 ($p < 0.05$) influenced booklet on the ability to practice BSE at High school 4 Gorontalo. These results indicated that the students' ability to practice BSE after being given booklets was higher than before being given booklets. This happens because after giving the booklet students get information directly on how to do BSE so that the booklet can affect students' ability to practice BSE. This is related to the advantages of the booklet, namely the material contained in the booklet is more complete, more detailed, clear and educative and the preparation of the booklet material is made in such a way as to attract the attention of adolescents, according to the needs and conditions of adolescents.

Respondents who did not experience an increase in the ability to do BSE or not skilled were 9 respondents (30%). The researchers assumed that the ability to practice BSE was not increased due to the respondent's inadequate ability or memory so that they could not understand the contents of the booklet and were unable to remember the steps of BSE properly. This is also possible due to differences in observations or perceptive power in understanding information.

Following Notoatmodjo (2007) in Setiawan (2017) that knowledge is influenced by many psychological factors, including intelligence, observation, comprehension, memory, learning motivation, and so on. So that it can be said that with the same information there will be many differences in understanding and knowledge.⁹

This is in line with the theory of Surya (1992) in Ramlah (2015), the ability to remember is often associated with mental activity in gaining knowledge and solving problems. The ability to remember students is closely related to learning activities. At the time of learning, students use the ability to remember to understand the knowledge and solve the problems it faces. While the ability to remember students is very dependent on the quality and quantity of learning outcomes they get.¹⁰ This is supported by research by Aini (2013) which states that memory and critical thinking skills greatly affect learning outcomes.¹¹

Based on the results of the study, after giving the video the ability to do BSE increased, namely as much as 83.3 3% with an average BSE ability of 1.619 and

the difference in the average increase before and after watching videos of 1.542.

The results of statistical tests with the T-test obtained $p\text{-value} = 0.001$ ($p < 0.05$), which means that there is an effect of video on the ability to practice BSE in students at High school 4 Gorontalo where the results of the skills in doing BSE after watching videos are higher than before watching the video. The results of this study are in line with Meilani's (2018) research, namely that there is an effect of BSE counseling with audio-visual media on the attitudes of young women in breast cancer prevention.¹² This study is also comparable to research by Shorea, et al. (2014) which states that video media can improve student learning systems about BSE so that students know the steps for self-breast examination (BSE).¹³

According to the researcher's analysis, it can be explained that the respondent's skills in doing BSE after being given the video, the respondent's ability is more skilled than before being given the video. This happens because after watching the video the respondent not only heard the material being delivered but also saw the steps of BSE through the video so that it could affect the students' skills in practicing BSE.

Giving videos is effective in increasing the knowledge and skills of students where a student can receive messages quickly, is easy to remember, can be received well, is more interesting and not monotonous because students listen and see so they are very enthusiastic about the content of the video and watch the video until the end. Through videos of adolescents, a clear explanation of BSE will be explained, namely the meaning, time objectives, and steps of BSE.

According to Munadi (2012), using video media has a more impact on health education, which relies on hearing and sight from the target, is interesting, the message is conveyed quickly and is easy to remember and can develop thoughts and develop the imagination of young women.¹⁴ This is in line with the research of Aeni (2018) that health education with video for young women can clarify the pictures and the important steps for BSE examination, because in the process of giving respondents not only hear voices but respondents will see directly and the steps breast self-examination (BSE).¹⁵

Respondents who did not experience an increase in the ability to do BSE or not skilled were 5 respondents (16.67%). Researchers assume that the ability to do BSE does not improve after watching the video. This is due to the lack of respondent attitudes which affect the skills in doing BSE. There are still many young women who have a negative attitude because they don't know the benefits of BSE. BSE is a fairly easy way to detect breast cancer early.

According to Notoatmodjo (2010), if someone has never seen, heard, or experienced breast cancer, it will tend to be indifferent to early detection efforts. This study is in line with research Wahyunings (2012) which shows that attitudes influence the skills of BSE, because attitude is a closed behavior or as a support for BSE.¹⁶

According to Wawan and Dewi (2010), attitude is a general evaluation made by humans of themselves, other people, objects, or issues. This can happen because in theory it is often stated that attitude is a predisposition (determinant) that leads to behavior following the attitude. Attitude to grow begins with the knowledge that is perceived as something good (positive) or not good (negative), then internalized into him.¹⁷

In line with the theory according to Fatimah (2017), the process of skill formation is through knowledge, understanding, assessing, attitude skills, interaction, and communication, and ultimately complex skills will be formed. Skills are a person's ability to act after first obtaining knowledge and attitudes that begin with sensing a certain object.¹⁸

The results of the analysis chi-square shows that media exposure and the value of report cards have meaningful relationships practically and statistically by upgrading the skills of BSE in High School 4 Gorontalo, which is indicated by the value of $p < 0.05$, age, which indicates that there is no significant relationship between age and the role of parents and the increase in BSE skills in High school 4 Gorontalo.

Based on the results of the bivariate analysis, it was found that the video and booklet had a $p\text{-value}$ of 0.75; OR 0.82; 95% CI 0.24-2.81. This means that students who use the BSE skills booklet are 0.82 times more skilled than videos. the result of others suggest there is a

significant relationship between the value of report cards with BSE skills of students with a p-value of 0.001; OR 10.7; 95% CI 2.10-54.01, which means that students with high report card scores, BSE skills are 10.7 times more skilled than students with low report card scores.

The results of the bivariate analysis showed that there was a significant relationship between the media and the BSE skills of female students with a p-value of 0.04; OR 4.1; 95% CI 1.01-16.95 which means that students who are exposed to the media have 4.1 more skill in BSE compared to students who are not exposed to the media.

Conclusions

The results of the study showed that there was an improvement in the ability of BSE students to practice in high school 4 Kota Gorontalo after reading the brochure and watching the BSE video. Suggested to students to increase awareness about and introduce BSE, as well as to increase the incidence of skills BSE, that the incidence of breast cancer or breast defects can be avoided and identified much earlier.

Ethical Clearance : This study approved ethical clearance from The Committee of Research Ethics of Health Polytechnic of Gorontalo, Indonesia. The informed consent include the research title, purpose, participants' right, confidentiality, and signature.

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Conflict of Interest : The author declare that no conflict of interest.

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