THE EFFECT OF BSE WITH AUDIOVISUAL METHODS ON BSE SKILL FOR TEENAGE GIRLS

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ABSTRAK PENYULUHAN SADARI DENGAN METODE AUDIOVISUAL TERHADAP KETERAMPILAN SADARI PADA REMAJA PUTRI

Latar Belakang : Angka kejadian penyakit kanker di Indonesia (136.2/100.000 penduduk) berada pada urutan 8 di Asia Tenggara, sedangkan di Asia urutan ke 23. Angka kejadian tertinggi di Indonesia untuk laki laki adalah kanker paru yaitu sebesar 19,4 per 100.000 penduduk dengan rata-rata kematian 10,9 per 100.000 penduduk, yang diikuti dengan kanker hati sebesar 12,4 per 100.000 penduduk dengan rata-rata kematian 7,6 per 100.000 penduduk. Sedangkan angka kejadian untuk perempuan yang tertinggi adalah kanker payudara yaitu sebesar 42,1 per 100.000 penduduk dengan rata-rata kematian 17 per 100.000 penduduk yang diikuti kanker leher rahim sebesar 23,4 per 100.000 penduduk dengan rata-rata kematian 13,9 per 100.000 penduduk.Kanker payudara adalah kanker terbanyak kedua di dunia merupakan kanker yang sering terjadi pada perempuan. Salah satu upaya untuk menekan angka kematian akibat kanker payudara adalah dengan deteksi dini kanker payudara yaitu dengan teknik SADARI.

Tujuan : mengetahui pengaruh penyuluhan dengan menggunakan metode Audiovisual terhadap keterampilan SADARI pada remaja putri.

Metode : Jenis penelitian ini adalah menggunakan metode pre experimen. Rancangan yang digunakan dalam penelitian ini menggunakan one group pre-test and post-test yaitu dengan cara melakukan satu kali pengukuran didepan (pretest) sebelum adanya perlakuan (treatment) dan setelah itu dilakukan pengukuran lagi (posttest). Sampel dalam penelitian I adalah remaja putri yang berusia 10-19 tahun di Kelurahan Sumber Agung Kecamatan kemiling Bandar Lampung berjumlah 46 responden. Teknik sampling dalam penelitian ini adalah purposive sampling. Analisis data yang di gunakan dalam penelitian ini adalah analisis univariat untuk mengetahui distribusi frekuensi dan analisis bivariat untuk mengetahui pengaruh penggunaan media audiovisual terhadap keterampilan SADARI dengan menggunkan Uji Wilcoxon.

Hasil : hasil analisis menunjukan adanya pengaruh penyuluhan dengan menggunakan metode Audiovisual terhadap keterampilan SADARI dapat di buktikan dengan nilai p value 0,000.

Kesimpulan : penyuluhan dengan menggunakan metode Audiovisual berpengaruh terhadap peningkatan keterampilan SADARI pada remaja putri.

Saran untuk peneliti selanjutnya di mohon untuk penelitian kedepannya dapat di tambahkan variable dalam penelitian misalnya dengan membandingkan dengan media leaflet atau booklet untuk memberikan pendidikan kesehatan tentang SADARI pada remaja putri

Kata kunci: Audiovisual, Keterampilan SADARI, Remaja Putri

ABSTRACT

Background : The incidence of cancer in Indonesia (136.2/100,000 population) is at number 8 in Southeast Asia, while in Asia it is at 23. The highest incidence rate in Indonesia for men is lung cancer, which is 19.4 per 100,000 population with an average 10.9 deaths per 100,000 population, followed by liver cancer at 12.4 per 100,000 population with an average death rate of 7.6 per 100,000 population. Meanwhile, the highest incidence rate for women is breast cancer, which is 42.1 per 100,000 population with an average death rate of 17 per 100,000 population, followed by cervical cancer at 23.4 per 100,000 population with an average death rate of 13.9 per 100,000 population. Breast cancer is the second most common cancer in the world and is a cancer that often occurs in women. One of the efforts to reduce the mortality rate from breast cancer is by early detection of breast cancer, with the BSE technique.

Purpose: to determine the effect of counseling using the Audiovisual method on BSE skills in adolescent girls.

Methods: this study used a pre-experimental method. The design used in this study was one group pre-test and post-test by taking one measurement before treatment (pretest) and after treatment (posttest). The
sample in this study was teenage girls aged 10-19 years in Sumber Agung Village, Kemiling, Bandar Lampung with 46 respondents. The sampling technique in this research was purposive sampling. The data analysis used in this study was univariate analysis to determine the frequency distribution and bivariate analysis to determine the effect of using audiovisual media on BSE skills using the Wilcoxon test.

Results: the results of the analysis showed that there was an effect of counseling with the Audiovisual method on BSE skills proven by p value =0.000.

Conclusion: counseling using the audiovisual method had an effect on increasing BSE skills in adolescent girls. It is recommended for women (especially starting from adolescence) to routinely carry out early detection of breast cancer with the BSE technique to reduce women's deaths caused by breast cancer.

Suggestions for further researchers are that it is hoped that future researchers add variables in their studies, for example by comparing with leaflet media or booklets to provide health education about BSE in adolescent girls.

Keywords: Audiovisual, BSE Skill, Teenage girls

INTRODUCTION

Breast cancer is the second most common cancer in the world and the most common cancer occurs in women with an estimated 1.67 million new cancer cases diagnosed in 2012 (25% of all cancers) (Indonesia, n.d.). It is estimated that by 2030 the incidence of cancer will reach 26 million people and 17 million of them will die (Aeni & Yuhandini, 2018).

According to World Health Organization (2013, breast cancer is a cancer with the highest percentage of new cases. The number of breast cancer sufferers increased by 1.7 million women from the previous in which 6.3 million were diagnosed with breast cancer in the last 5 years. Breast cancer is also a cancer that is the most common cause of death in women, amounting to 522,000 deaths. Breast cancer is the second most common cancer in women in developing countries (Rachman & Zuntari Dwi Putri, 2020).

Based on the data from the International Agency for Research on Cancer (IARC) Globocan in 2018, it was found that there were 36 breast cancer patients in Indonesia per 100,000 women. Meanwhile, the data from the Hospital Information System (SIRS) in Indonesia in 2007 revealed that breast cancer ranked first in inpatients (16.85%) and outpatients (21.69%) or it was higher than cervical cancer (17%) (Departemen Kesehatan RI, 2009).

One of the most common types of cancer in women is breast cancer and most are detected at an advanced stage at the age of 45-64 years (Verralls, 2003) Therefore, a breast examination method was developed or also called breast self-exam (BSE). BSE is a means to detect breast cancer early. BSE is an examination technique in which a woman examines her own breasts by looking and sensing them with her fingers to detect whether or not there are lumps in her breasts (Bensol R & Prenol, 2009).

Breast cancer can be detected early by breast self-examination to know the early stages of the likely breast cancer, so that early treatment will prolong the life expectancy of breast cancer patients. Breast self-examination (BSE) can be applied to young women who go through physical changes and secondary sex development such as the period of puberty when experiencing breast enlargement that occurs between the ages of 12-13 years (Manuaba ida Bagus, 2010). The benefits of breast self-examination in adolescent girls are to detect tumors or lump in the breast early (Herlina, 2015).

Breast self-examination is an activity that does not take long time aiming to find anomalies in the breast and can be done by oneself (Kementrian Kesehatan RI, 2015). Early detection is targeting women aged 20 years or more. However, in Indonesia early detection is prioritized in women aged 30-50 years and the target is expected to be 50% until 2019 (Kementrian Kesehatan RI, 2015).

Self-breast examination (BSE) coverage in Indonesia has increased and decreased every year, in 2016 by 5.15%, then the following year by 6.34% and the latest was by 7.34%. Meanwhile in Lampung Province, regarding breast self-examination coverage (BSE), there was an increase in 2016 of 4.68%, then the following year by 6.69%.
and in 2018 of 17.47% (Lubis, 2017). However, this coverage is still very low because from the last 3 years, 2016, 2017 and 2018, the coverage did not reach 50%, especially in Indonesia (Kementrian Kesehatan RI, 2015).

BSE technique is very easy to do, but many women, especially teenagers, still don’t understand the signs of abnormal symptoms in their breasts. This can be caused by a lack of information regarding the prevention and detection of breast cancer. BSE is not a popular term among young women especially teenage girls so that most of them also feel uncomfortable and uneasy to carry out early detection of breast cancer with the BSE technique (Hartutik & Pradani, 2020).

Risk factors that are assumed to increase the incidence of breast tumors are families who have a history of the same disease which has passed down hereditary. Unhealthy lifestyles such as smoking habits and the habit of consuming alcohol and obesity are also risk factors for a person to suffer from breast tumors (Mursalim et al., 2021).

Breast cancer can be detected early with BSE, clinical examination and mammography examination. Early detection can reduce mortality by 25-30%. BSE or Breast Self-Examination should be carried out by all women under the age of 20 every month and they should immediately consult a doctor if a lump is found. The high incidence of breast cancer results in many breast cancer sufferers die. If the signs and symptoms of breast cancer can be detected as early as possible, the cure rate will be higher. One of the efforts that can be done to prevent breast cancer is to implement a healthy lifestyle and perform breast self-examination or BSE (Nugroho, 2011).

Handling cancer cases in Indonesia faces various obstacles that cause nearly 70% of patients to be found in an advanced stage. The number of cases of breast cancer found in an advanced stage is due to the low awareness, interest and knowledge of the community about cancer and its early detection (Handayani, Sri., & Sudarmiati, 2012). To detect the presence of breast cancer, Breast Self-Examination (BSE) can be carried out easily and by oneself at home. This action is very important because almost 85% of breast lumps are detected by the sufferers themselves (Dyayadi, 2009).

One form of health education is the audiovisual method. Providing information with the audiovisual method will be more practical and flexible for the community in increasing the importance of BSE. This type of media has better capabilities because it includes sound and pictures. Audiovisual media is a medium used to convey learning messages (Rachman & Zuntari Dwi Putri, 2020).

To increase public knowledge about BSE, providing information through health education is essential step. Using media audio-visual is the most effective way. This is because the audio-visual media is as a carrier of information not only as a human tool. The BSE videos provide explanations and the picture of the importance of examining breasts, in which the participants not only hear the explanations but also can see the steps how to carry out BSE by themselves (Dhawo, Maria Silvana, Pratiwi, 2019).

Based on the results of the initial survey conducted by the researchers to 5 teenage girls about BSE in Sumber Agung Village, it was found that 4 people (90%) did not know about BSE and only 1 teenage girl (10%) knew about BSE.

The purpose of this study was to determine the effect of BSE counseling with the audiovisual method on BSE skills in teenage girls in Sumber Agung Village.

**RESEARCH METHODOLOGY**

This study used pre-experimental method. The design used in this study was one group pre-test and post-test by taking one measurement before treatment (pretest) and after treatment (post-test). The researchers could examine changes occurred after the treatment, but in this design there was no control or comparison group. This study was carried out on young women (teenage girls) in Sumber Agung Village, Kemiling District, Bandar Lampung. The population in this study were all teenage girls in Sumber Agung Village, Kemiling District, Bandar Lampung. Then, the sample in this study was 46 respondents. The sampling technique used was purposive sampling using the issac and michale formulas (Sugiyono, 2012).

The data in this study were in the form of primary data. The data were obtained directly from the respondents, by observing BSE skills with an observation sheet / BSE checklist. The results of the observations were recorded in the observation
sheet then were tested using SPSS to determine the improvement of the skill before and after being given counseling using the audiovisual method to the respondents. In this study there were two variables, namely that the independent variable is counseling with audiovisual methods and dependent variable is BSE skills.

Data analysis was carried out systematically starting with univariate analysis to determine the frequency distribution based on the characteristics of the respondents from the questionnaire sheet, then normality test was carried out. Then, bivariate analysis was carried out using the Wilcoxon test to determine the effect of using the audiovisual method on BSE skills in teenage girls. Ethical clearance was obtained from the ethics commission of the Tanjung Karang Health Polytechnic. Permission to conduct a study was obtained from the Department of Investment and One Stop Integrated Services, Bandar Lampung City, Bandar Lampung Health Office, and Sumber Agung Village, Kemiling Subdistrict, Bandar Lampung City. In addition, this study also has had informed consent form filled out by the respondents as evidence of their agreement to be involved in this study.

RESEARCH RESULTS

Characteristics of Respondents

Univariate Analysis

Regarding the characteristics of the respondent based on the age, table 1 shows that the majority of respondents are categorized into middle adolescence category, 69.6%. Then, in terms of respondents’ education level, almost half of them (45.7%) have high school education. Then, regarding the history of cancer in the family, almost all (76.1%) of the respondents do not have a history of cancer in the family.

Table 1
Respondents’ characteristics based on age, education and family history of cancer

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early Adolescence (10-13 years old)</td>
<td>9</td>
<td>19.6</td>
</tr>
<tr>
<td>Middle Adolescence (14 – 16 years old)</td>
<td>32</td>
<td>69.6</td>
</tr>
<tr>
<td>Late Adolescence (17 – 19 years old)</td>
<td>5</td>
<td>10.9</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior High School</td>
<td>18</td>
<td>39.1</td>
</tr>
<tr>
<td>Senior High School</td>
<td>21</td>
<td>45.7</td>
</tr>
<tr>
<td>University</td>
<td>7</td>
<td>15.2</td>
</tr>
<tr>
<td>Cancer History In the Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>11</td>
<td>23.9</td>
</tr>
<tr>
<td>No</td>
<td>35</td>
<td>76.1</td>
</tr>
</tbody>
</table>

Table 2
Frequency distribution of BSE (Breast Self-Examination) skills before and after being given audiovisual counseling to teenage girls BSE Skills

<table>
<thead>
<tr>
<th>Pre-experiment</th>
<th>Beginner F</th>
<th>Beginner %</th>
<th>Intermediate F</th>
<th>Intermediate %</th>
<th>Advanced F</th>
<th>Advanced %</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before</td>
<td>26</td>
<td>56.5</td>
<td>16</td>
<td>34.8</td>
<td>4</td>
<td>8.7</td>
<td>46</td>
</tr>
<tr>
<td>After</td>
<td>2</td>
<td>4.3</td>
<td>11</td>
<td>23.9</td>
<td>33</td>
<td>71.7</td>
<td>46</td>
</tr>
</tbody>
</table>

Based on Table 2, it shows before being given BSE counseling (Breast Self-Examination) using Audiovisual, most of the respondents (56.5%) belong to beginner category regarding BSE skills, while after being given BSE counseling (Breast Self-Examination) using Audiovisual almost all of the respondents (71.7%) belong to advanced category.

Bivariate Analysis

Analysis of the effect of BSE counseling (Breast Self-Examination) using the Audiovisual method on BSE skills in teenage girls.
Table 3
Analysis of the effect of BSE counseling (Breast Self-Examination) using the Audiovisual method on BSE skills in teenage girls.

<table>
<thead>
<tr>
<th>Pre – experiment</th>
<th>The average score of pre-test and post-test related to BSE skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counseling using audiovisual media</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>46</td>
</tr>
</tbody>
</table>

*Wilcoxon test 0.05 level significant

Table 3 shows that the results before being given counseling using the audiovisual method consisting of 46 respondents have a mean (average) score of 1.52, while after being given counseling using the audiovisual method it has a mean score of 2.67. The results of the Wilcoxon Signed Test obtained a p-value of 0.000 (p<0.05), and the results of the analysis shows p-value <0.05, meaning that there is a significant difference in before and after being given counseling using the Audiovisual method.

Based on the results of the analysis through the Wilcoxon test with SPSS 20, it shows a significance value or p-value of 0.000. The p-value in this study is smaller than the value of α=0.05. If the p-value < 0.05, it means that H0 is rejected or H1 is accepted. This means that there is an influence BSE counseling using the audiovisual method on BSE skills in teenage girls.

Based on table 4, it shows that the total number of respondents is 46 respondents. There are 37 respondents with a positive rank, meaning that from 46 respondents compared, there are 37 respondents who indicate an improvement in their BSE skill after being given BSE counseling with the audiovisual method if compared to before being give counseling. Then, there are 9 respondents who do not show an improvement or decrease in their BSE skill after being given BSE counseling using the audiovisual method.

Table 4
The value of the improvement before and after being given counseling using the audiovisual method on BSE skills

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean Rank</th>
<th>Sum of Ranks</th>
</tr>
</thead>
<tbody>
<tr>
<td>After-Before</td>
<td>0&lt;</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Negative Ranks</td>
<td>37&gt;</td>
<td>19,00</td>
<td>703.00</td>
</tr>
<tr>
<td>Positive Ranks</td>
<td>9&gt;</td>
<td>37.00</td>
<td></td>
</tr>
<tr>
<td>Ties</td>
<td>9&gt;</td>
<td>9.00</td>
<td></td>
</tr>
</tbody>
</table>

a. After < Before
b. After > Before
c. After = Before

To clarify the difference in the average improvement before and after being given counseling using the media audiovisual, it can be explained by using the following figure.

To clarify the difference in the average improvement before and after being given counseling using the media audiovisual, it can be explained by using the following figure.
DISCUSSION

This study aimed to determine the effect of BSE counseling using audiovisual method on BSE skills in teenage girls. The results of this study indicated that there was an improvement in BSE skills before and after being given counseling using the audiovisual method showed by p value of 0.000.

The counseling using audiovisual method has an effect if the method is in accordance with the achievement of the goals and objectives that have been set in which an activity is carried out appropriately and gives a useful result (Wulandari, 2017). Audio-visual media is a type of media containing sound elements and images that can be seen, such as video recordings, various sizes of films, sound slides and so on. This audio visual is considered better and more interesting, because it contains two elements, namely being heard and seen (Deviani et al., 2020).

Providing information can be carried out by conducting counseling using audiovisual media. This will improve public understanding of BSE. Counseling delivered using audiovisual media will be more effective (Rivan, 2017). According to Dale’s theory, learning using audiovisual media will make it easier for respondents because the media uses concrete experience as a learning model. (Wahyuningtyias, 2012). The use of audiovisual to socialize about BSE can clarify the abstract picture regarding the importance of breast self-examination because in the process of giving it respondents not only hear the material presented but also see directly and clearly about the steps of BSE (D. Lestari et al., 2016).

Based on the results of this present study, health counseling with video is an effective learning medium in improving knowledge or skills, because someone will receive the material quickly and will understand better. This is because the material is presented using something interesting, and not monotonous because it can be heard and can also be seen. Through videos, teenagers will be provided clear explanations about the meaning, purpose, time, and steps for doing BSE (Mursalim et al., 2021).

Health counseling for a teenager is able to control their own health from an early age (Yusuf, 2018). When given health counseling to adolescents, they will experience an improvement in knowledge that will affect attitudes, behavior, and skills in implementing BSE (Rachman & Zuntari Dwi Princess, 2020).

Audiovisual media is a type of media that not only contains sound elements but also contains images that can be seen. This audiovisual is considered better and more interesting, because it contains both elements, namely being heard and seen (Indrawati, 2018). By using audiovisuals method, it is hoped that health promotion will be more effective in improving the knowledge of teenage girls because through the use of audiovisual media, the teenage girls will be provided clear explanations about BSE including definition, benefits, objectives and good and correct procedures in carrying out BSE (Notoatmojo, 2010).

The results of this study are in line with a
study conducted by Indrawati (2018) showing that there were differences between health education using leaflets and using audiovisuals, and the use of audiovisual was more effective than using leaflets which was indicated by the value of improving knowledge using audiovisual of 11.33 and using leaflets of 9.78 (Indrawati, 2018).

Later, this present study is also in line with a study conducted by Fitrian & Tazkiah (2020) revealed that health education using video media was more effective in improving young women's knowledge about BSE, as evidenced by the p value of 0.000 and there was a significant difference in knowledge of young women before and after counseling using video media with an average score of 47.75 increasing to 78.00 (Fitrian & Tazkiah, 2020).

Based on the results of a study carried out by Yesi (2015) in Baku District, Sukoharjo Regency, audiovisual media provides high effectiveness in improving knowledge of Breast Self-Examination. It is also supported by the results of a study conducted by Suestivioka et al. (2019) showing that audiovisual media is more effective than audio media in improving knowledge of Breast Self-Examination.

The use of learning media is needed to channel messages, stimulate the thoughts, feelings, and willingness of respondents and activate them in responding so that they can increase respondents' learning motivation to practice correctly. Audiovisual media is media that has sound and image elements. This type of media has better capabilities because it includes sound and images. Audiovisual media is a medium used to convey learning messages. In audiovisual media there are two unified elements, namely audio and visual. The audio element allows students to receive learning messages through hearing, while the visual elements allows the creation of learning messages through the form of visualization (T. R. Lestari et al., 2018).

This is in accordance with the results of a study carried out by Hapsari (2018) showing that respondents' skills in carrying out BSE has increased after counseling. Health education has a real influence on one's skills. Counseling has an influence on changes in behavior patterns to find out about how to detect breast cancer and provide awareness for women to pay attention to their own breasts (Hapsari & Dwihestie, 2018).

Audiovisual media is more interesting than other media. It is clear that the audiovisual media has advantages. It can be due to various reasons. One of the most likely is because the part of the brain that processes information via audiovisual media is more much compared to if the information is only obtained via audio media. In order to digest the information captured by the eyes, it is necessary to have a brain region known as the occipital lobe located at the back of the head (D. Lestari et al., 2016). While the information processing site via auditory, the brain area that works is the temporal lobe which is located on the left and right side of the human brain, especially the left side as the language center. The more parts of the brain involved in processing information, the easier for the brain to store the information received (Deviani et al., 2020).

CONCLUSIONS

Based on the results of the study, it could be concluded that there was an effect of BSE counseling using the audiovisual method on skills BSE in teenage girls. It was indicated by a significant p value of 0.000. Further, there was an improvement in BSE skills before and after being given counseling using the audiovisual method in teenage girls, from 1.57 to 2.67. It is hoped that further researchers can work together with health workers to provide counseling about breast self-examination as an effort to detect breast cancer early.

SUGGESTIONS

It is hoped that this study can be used as a reference in preventive measures as an effort to detect breast cancer early. Then, it is hoped for future researchers to add variables in their studies, for example by comparing the audiovisual media with leaflets or booklets to provide health education about BSE to teenage girls.

ACKNOWLEDGEMENTS

We would like to thank to the Higher Education Service Institute Region II which has funded this study. We also say big thanks to all those who have helped in the process of conducting this study from the beginning to the end so that this study can be completed properly.
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SADARI pada siswi kelas X di SMAN 8 Kendari: The Effect of Counseling Through Video Media on the Improvement of BSE Knowledge in Class X students.


https://doi.org/10.36749/seajom.v5i2.68


