

The Effectivity Of Animated Video Toward Knowledge And Practice About Breast Cancer Self Examination Among Female Students

Fina Syafitra¹, Niken Meilani², Wafi Nur Muslihatun³

¹²³ *Midwifery Department of Poltekkes Kemenkes Yogyakarta*

Jl. Mangkuyudan MJ III/304, Mantrijeron, Yogyakarta City

Author's Email: finasya03@gmail.com¹, niken.meilani@poltekkesjogja.ac.id²,
wafinuranwar@gmail.com³

ABSTRACT

Breast cancer is a leading cause of death among women globally, including in Bantul Regency, particularly in Sewon District, which has the lowest early detection rates. This study aims to analyze the effect of animated video media on the knowledge and practices of early breast cancer detection among female students at SMK Negeri 2 Sewon. The research method employed is a quasi-experimental design using a pretest-posttest control group, conducted in January 2024. The sample consisted of 50 students in the experimental group and 50 in the control group, selected through purposive sampling. Data analysis was performed using Wilcoxon and Mann Whitney tests. The results indicate a significant increase in knowledge ($p=0.000$) and practices ($p=0.000$) in the experimental group, with average knowledge improvement of 64.15 and practice improvement of 69.14, while the control group showed average knowledge improvement of 36.85 and practice improvement of 31.86 ($p=0.000$). These findings suggest that animated video media is more effective than leaflets in enhancing knowledge and practices related to early breast cancer detection. The conclusion of this research demonstrates that the use of BSE animated video media significantly improves knowledge and practices of early breast cancer detection among tenth-grade female students, with positive implications for health awareness efforts among adolescents.

Keywords: Breast, Cancer, Detection, High School, Media

INTRODUCTION

In 2020, breast cancer became the most common type of cancer worldwide, with the number of cases reaching 2.2 million, representing an increase of approximately 1% from 2018. According to data from the Global Cancer Observatory (GLOBOCAN) 2020 published by the International Agency for Research on Cancer (IARC), breast cancer ranked as the fifth leading cause of cancer-related deaths globally, following stomach cancer, with a total of 684,000 deaths. The World Health Organization (WHO) projects that the incidence of breast cancer worldwide will continue to rise, with an estimated 3.19 million cases expected by 2040.¹

In Asia, breast cancer ranked as the second most common cancer in 2020, following lung cancer, with a total of 1 million cases reported. It was also the sixth leading cause of cancer-related deaths, causing 346,000 fatalities after esophageal cancer. Meanwhile, in Southeast Asia, breast cancer was the most prevalent, recording 158,000 cases. However, the mortality rate from breast cancer in this region ranked third, following liver cancer, with 58,000 deaths.¹

In 2020, breast cancer became the most common cancer in Indonesia, with a total of 65,000 cases reported. This resulted in breast cancer being the second leading cause of cancer-related deaths in the country for that year, following lung cancer, which caused 22,400 fatalities.¹ According to the 2018 Basic Health Research (Riset Kesehatan Dasar) data, the highest prevalence of breast cancer in Indonesia was found in the Special Region of Yogyakarta, with a rate of 4.86 cases per 1,000 residents. In 2016, the number of new breast cancer cases reported in the Special Region of Yogyakarta was 899, distributed across four districts. Bantul reported the highest number of cases with 312 (38.01%), followed by Gunung Kidul with 276 cases (29.24%), Yogyakarta City with 273 cases (28.82%), and Sleman with 38 cases (4.01%).²

In 2022, the Health Office of Bantul Regency revealed that community participation in breast cancer early detection varied across districts and health centers in Bantul. The health centers with the lowest participation in early breast cancer detection that year were Puskesmas Sewon I and Puskesmas Dlingo I, each recording only 13 participants.³

The Indonesian government has implemented cancer prevention efforts through a program promoting early detection of breast cancer using the Breast Self-Examination (BSE) method, as it is considered one of the simplest approaches for early detection of breast cancer.⁴ BSE is a self-examination method for early detection of breast cancer that is recommended for adolescent girls to perform routinely starting from menarche, or around the age of 12. Therefore, this study aims to investigate the impact of animated video media on enhancing knowledge and practices related to breast self-examination (BSE) for the early detection of breast cancer among female students at SMK Negeri 2 Sewon.

MATERIAL AND METHOD

This type of research is an intervention study that applies a quasi-experimental method with a Control Group design using a pretest-posttest group design approach. In the experimental class, the researcher used audiovisual media (animated video) in the learning activities, while the control class used leaflet media. This study employed purposive sampling techniques.

Purposive sampling was used, with sample selection based on inclusion and exclusion criteria established by the researcher. The sample size was determined based on the population size using the sample size formula from Lameshow et al. (1997), resulting in 45 female students in each group. To anticipate dropouts, the sample size was set at 50 female students in each group.

The research took place at SMK Negeri 2 Sewon and was conducted from January 23, 2024, to February 13, 2024. Two types of questionnaires were used: a knowledge questionnaire and a practice questionnaire. The knowledge and practice questionnaires underwent validity testing before being used in the study. Data analysis included univariate analysis to determine the characteristics of each research variable, and bivariate analysis to compare the average knowledge and attitudes before (pretest) and after (posttest) the intervention in each group. Subsequently, an analysis was performed to determine the effect of the BSE video media on improving knowledge and attitudes in the experimental group.

This study has received approval and ethical clearance, which was granted on December 29, 2023, under the number DP.04.03/e-KEPK.1/946/2023. Animated Video: BSE had intellectual property rights from kementerian hukum dan hak asasi manusia with the numbers EC00202458410, 02 July 2024.

RESULTS AND DISCUSSION

Table 1. Distribution of Respondent Characteristics

Characteristics	Respondent Group			
	Experimental		Control	
	n	%	n	%
Menarche Age				
<12 years	13	26	17	34
≥12 years	37	74	33	66

Source of Information

Print Media	3	6	2	4
Electronic Media	45	90	44	88
Health Personnel	2	4	4	8

Based on the data in Table 1, it is known that the majority of respondents in both the experimental and control groups experienced their first menstruation, or menarche, at the age of 12 or older, with percentages of 74% and 66%, respectively. This contributes to the normal age range for adolescent girls. The normal age range for girls experiencing menarche is between 10 and 16 years old. Additionally, the first menstruation, or menarche, serves as a biological sign of a woman's sexual maturity.⁵ Meanwhile, the primary source of health information for respondents in both groups was significantly obtained through electronic media, with percentages of 90% and 88%.

The main source of health information for respondents in both groups, both experimental and control, was predominantly obtained from electronic media, with percentages of 90% and 88%, respectively. The information obtained from various sources can influence an individual's level of knowledge.⁶

The homogeneity of the pre-test questionnaire results for the experimental and control groups shows a significance value (sig) based on the mean of 0.424 > 0.05, indicating that both groups are homogeneous.

Table 2. Minimum, Maximum, Mean, and Median Values of Pre-Test and Post-Test Knowledge for the Experimental and Control Groups

Treatment		Min	Max	Mean	Median
Experimental	Pre-Test	52	88	70,32	72,00
Group	Post-Test	76	92	84,00	84,00
Control	Pre-Test	48	84	70,80	74,00
Group	Post-Test	56	84	78,08	80,00

Based on Table 2, pre-tests and post-tests were administered to measure knowledge about the early detection of breast cancer among two groups of respondents: the experimental group and the control group. The pre-test results indicate that the experimental group had an initial knowledge level with a minimum score of 52 and a maximum score of 88, with a mean of 70.32 and a median of 72. In contrast, the control group had a minimum score of 48 and a maximum score of 84, with a mean of 70.80 and a median of 74. After the intervention, the post-test

scores for both groups showed an increase in knowledge. The experimental group achieved post-test scores with a minimum of 76 and a maximum of 92, with a mean of 84 and a median of 84. Meanwhile, the control group had a minimum score of 56 and a maximum score of 84, with a mean of 78.08 and a median of 80.

Table 3. Frequency Distribution of Pre-Test and Post-Test Knowledge Levels for Early Detection of Breast Cancer

Category	Pre-Test				Post-Test			
	Experimental Group		Control Group		Experimental Group		Control Group	
	n	%	n	%	n	%	n	%
Good	21	42	25	50	50	100	40	80
Sufficient	27	54	21	42	0	0	10	20
Poor	2	4	4	8	0	0	0	0

Table 3 shows the frequency distribution of pre-test and post-test knowledge levels regarding the early detection of breast cancer between the experimental and control groups. In the pre-test for the experimental group, there were 21 respondents (42%) with a good knowledge level, 27 respondents (54%) with a sufficient knowledge level, and 2 respondents (4%) with a poor knowledge level. Meanwhile, in the control group, there were 25 respondents (50%) with a good knowledge level, 21 respondents (42%) with a sufficient knowledge level, and 4 respondents (8%) with a poor knowledge level.

In the post-test, the knowledge level regarding the early detection of breast cancer showed significant changes. In the experimental group, all respondents, totaling 50 (100%), achieved a good knowledge level after the intervention. In contrast, the control group had 40 respondents (80%) with a good knowledge level, 10 respondents (20%) with a sufficient knowledge level, and no respondents with a poor knowledge level after the intervention.

Table 4. Pre-Test and Post-Test Practice for Experimental and Control Groups

	Treatment	Min	Max	Mean	Median
Experimental Group	Pre-Test	0	0	0	0
	Post-Test	34,50	81,50	61,21	61,50
	Pre-Test	0	0	0	0

Control Group	Post-Test	26,75	69,00	42,58	42,25
---------------	-----------	-------	-------	-------	-------

Table 4 displays the pre-test and post-test results for breast cancer early detection practices for both groups, experimental and control. In the pre-test, both the experimental and control groups had a minimum, maximum, mean, and median score of 0, indicating that before the intervention, there was no difference in early detection practices between the two groups. However, after the intervention, the experimental group showed a significant increase in breast cancer early detection practices, with post-test scores ranging from a minimum of 34.50 to a maximum of 81.50, with a mean and median of 61.21 and 61.50, respectively. Meanwhile, the control group also experienced an increase after the intervention, but not as substantial as that of the experimental group, with a minimum post-test score of 26.75 and a maximum of 69.00, along with a mean and median of 42.58 and 42.25, respectively.

Table 5. Frequency Distribution of Pre-Test and Post-Test Practices for Early Detection of Breast Cancer

Category	Pre-Test				Post-Test			
	Experimental Group		Control Group		Experimental Group		Control Group	
	n	%	n	%	n	%	n	%
Good	0	0	0	0	3	6	0	0
Sufficient	0	0	0	0	35	70	8	16
Poor	50	100	50	100	12	24	42	84

Table 5 illustrates the frequency distribution of pre-test and post-test practices for breast cancer early detection for both the experimental and control groups. In the pre-test, there were no respondents (0%) in either group who received a rating of "Good" or "Sufficient," while all respondents (100%) in both groups were categorized as "Poor." In the post-test for breast cancer early detection practices for both groups, the experimental group showed a significant improvement in the "Good" and "Sufficient" categories, with 3 participants (6%) achieving a "Good" rating and 35 participants (70%) achieving a "Sufficient" rating. Meanwhile, in the control group, there were still no participants reaching the "Good" category, and

only 8 participants (16%) reached the "Sufficient" category. The majority of respondents in the control group (84%) remained in the "Poor" category.

Table 6. Normality Test

	Kolmogorov-Smirnov		Knowledge
	Group	P value	
Knowledge	Experimental	0,016	Not Normal
	Control	0,000	Not Normal
Pratice	Experimental	0,007	Not Normal
	Control	0,010	Not Normal

Based on the Kolmogorov-Smirnov normality test on the knowledge questionnaire, the p-values for the differences in means between the experimental and control groups were found to be 0.016 and 0.000, respectively. For the practice questionnaire, the p-values for the differences in means between the experimental and control groups were 0.001 and 0.047, respectively. After conducting the normality test, it was determined that the data in this study did not follow a normal distribution because the p-value $< \alpha = 0.05$, leading to the use of the Wilcoxon test.

Table 7. Differences in Average Knowledge and Practice of Class X Students Before and After the Animation Video Intervention on BSE

	Treatment	Min	Max	Mean	Median	Median Difference	P-Value
Knowledge	Before	52	88	70,32	72,00	12	0,000
	After	76	92	84,00	84,00		
Pratice	Before	0	0	0	0	61,50	0,000
	After	34,5 0	81,50	61,21	61,50		

Table 7 shows that most respondents in the experimental group experienced an increase in knowledge scores. The median score before the intervention was 72, which increased to 84 after the animation video on BSE was provided. The difference in median scores before and after is 12, with a p-value of 0.000. Additionally, most respondents also experienced an increase in practice scores. The median score before the intervention was 0, which increased to 61.50 after the intervention. The difference in median scores before and after is 61.50, with a p-value of 0.000.

Table 8. Differences in Average Knowledge and Practice of Class X Students Before and After the Leaflet Intervention

	Treatment	Min	Max	Mean	Median	Median Difference	P-Value
Knowledge	Before	48	84	70,80	74,00	6	0,000
	After	56	84	78,08	80,00		
Pratice	Before	0	0	0	0	42,25	0,000
	After	26,75	69,00	42,58	42,25		

Table 8 shows that most respondents in the control group improved their knowledge scores, with the median increasing from 74 to 80 after the BSE leaflet intervention (median difference: 6, p-value: 0.000). Practice scores also rose from a median of 0 to 42.25, reflecting a significant improvement (median difference: 42.25, p-value: 0.000).

Before the intervention, both the animation video and leaflet groups had sufficient average knowledge but poor practice scores (100% in the poor category). This aligns with Wika Sari's 2019 study, which indicated that 44 female adolescents at SMAN 1 Sanden had sufficient knowledge.⁷ Indriani's 2017 research showing that female adolescents at SMK YMJ Ciputat lacked experience due to limited information exposure.⁸

After the intervention was provided to the two groups, the knowledge and practice levels regarding early detection of breast cancer showed an increase from before the intervention was administered. The knowledge level of the experimental group increased from 42% in the good category and 54% in the adequate category to 100% in the good category, while the practice level of the experimental group shifted from 100% in the poor category to 6% in the good category and 70% in the adequate category after the intervention using animated video media. Meanwhile, the knowledge level of the control group increased from 50% in the good category and 42% in the poor category to 80% in the good category and 20% in the adequate category. The practice level of the control group also changed from 100% in the poor category to 16% in the adequate category, with 84% still in the poor category after the intervention using leaflet media.

From the data above, it can be concluded that the treatment given to the experimental group successfully improved the knowledge and implementation of early detection practices for breast cancer, while the control group still requires further improvement.⁹ Thus, the intervention using SADARI animated video media has a greater impact compared to leaflet media in enhancing early detection practices for breast cancer, with the experimental group showing a more significant increase compared to the control group. This aligns with the research by Sutrio Syakir in 2018, which demonstrated that

interventions using animated video media significantly influenced the knowledge and behavior of subjects, evident from the differences in pre-test and post-test scores, as well as the utilization of animation media in interventions.¹⁰ It not only produces effective learning methods in a short time but also leads to the conclusion that information received through audiovisual means is retained longer and better because it engages more senses.¹¹

Video is an educational aid aimed at conveying health messages by stimulating the senses of hearing and sight. Knowledge is largely acquired through the visual sense (30%) and the auditory sense (10%).¹² The improvement in subjects' knowledge is influenced by the animated media that includes moving images and sounds, facilitating understanding for the subjects. Thus, health education using videos can clarify images and highlight the essential steps of the SADARI examination, as respondents not only hear the audio but also directly and clearly see the steps of self-breast examination (SADARI).¹³

Based on the post-test identification results using a knowledge questionnaire, most respondents in both the experimental and control groups were not fully aware that all women need to perform SADARI, not just those with a family history or those suffering from breast cancer, but also all women who have experienced menarche, with the number of respondents reaching 26 individuals. Additionally, there was a lack of understanding regarding breast cancer symptoms among 27 respondents. Awareness of the importance of the SADARI examination is crucial for the respondents to understand when it is the right time to conduct such examinations. Therefore, it is important to reiterate to the respondents regarding the aspects that are still not well understood.¹⁴

Bivariate analysis using the Wilcoxon test confirms the influence of both the BSE animation video and leaflet on knowledge improvement among Class X students, with average scores post-intervention higher than pre-intervention (p -value=0.000). The median knowledge improvement was 12 for the experimental group and 6 for the control group. Similarly, the experimental group's median practice improvement was 61.50, while the control group was 42.25, highlighting that the animation video led to more substantial enhancements in knowledge and practice regarding early breast cancer detection.

Table 9. Differences in Knowledge and Practice Improvements Among Class X Students Across Groups

	Group	N	Mean Rank	P- Value
Knowledge	Experimental	50	64,15	0,000
	Control	50	36,85	
Pratce	Experimental	50	69,14	0,000
	Control	50	31,86	

In Table 9, it can be seen that the Mann-Whitney test results for the knowledge and practice p-values are both 0.000. This value indicates that the interventions provided to both the experimental and control groups improved knowledge and practice regarding the early detection of breast cancer.

To assess the impact of educational media on the experimental and control groups, the Mann-Whitney test was conducted. The experimental group had an average knowledge increase of 64.15, compared to 36.85 for the control group (p-value: 0.000), indicating a significant difference. Similarly, the average practice increase for the experimental group was 69.14, while the control group saw an increase of 31.86 (p-value: 0.000). These results suggest that the BSE animation video effectively enhanced knowledge and practices for early breast cancer detection among SMK Negeri 2 Sewon Class X students.

The significant improvements in the experimental group indicate that video media can enhance learning retention through auditory and visual engagement.¹⁵ This aligns with Dewi Nopiska Lilis et al.'s 2022 research on animated videos and their positive influence on breast self-examination knowledge and behavior. Supporting evidence is also found in Riana's 2020 study.¹⁶ Which demonstrated the effectiveness of video counseling via WhatsApp on BSE knowledge and practices, both with p-values of 0.0001.¹⁷

Factors that influence knowledge include counseling, health education/health promotion, age, sources of information, education level, environment, and socio-cultural factors.¹⁸ In this study, the researcher provided an intervention in the form of health education using video as a medium, which serves as one of the factors influencing knowledge about early detection of breast cancer through SADARI. Additionally, the media also plays a crucial role in shaping individual attitudes.¹⁹

Health education through video media has the advantage of providing good visualization, which facilitates the process of knowledge absorption. Video is classified as audiovisual media because it involves both the auditory and visual senses.²⁰ This audiovisual media can yield better learning outcomes for tasks such as remembering, recognizing, recalling, and connecting facts and concepts. The effectiveness of video media in this study as a means of health education was well received by the respondents. This media offers a more engaging form of outreach.²¹ Video can depict a moving object along with natural sounds or appropriate audio. Video media relies on both the auditory and visual senses. It can present information, illustrate processes, explain complex concepts, and influence attitudes. Additionally, video media displays material concisely, clearly, and understandably, which can facilitate comprehension and strengthen the respondents' memory.²²

CONCLUSION

Based on the research findings and discussions, it can be concluded that most respondents in both the experimental and control groups reported menarche at age 12, with some obtaining health information from electronic media. Knowledge about self-breast examination significantly increased among adolescent girls in the experimental group at SMK Negeri 2 Sewon, Bantul, after watching the animated video, while the control group at SMK Negeri 1 Sewon also showed improvement after reading the leaflet. Additionally, both groups experienced enhanced practices of self-breast examination, with the experimental group showing greater average knowledge and practice improvements compared to the control group. Overall, the SADARI animated video effectively influenced knowledge and practices related to early breast cancer detection among tenth-grade female students at SMK Negeri 2 Sewon.

ACKNOWLEDGEMENT

The author wishes to express gratitude to the director of Poltekkes Kemenkes Yogyakarta, the heads of SMK Negeri 1 Sewon and SMK Negeri 2 Sewon, as well as everyone else who contributed to the study and allowed it to proceed.

FUNDING INFORMATION

This thesis was entirely funded by the author through personal finances. All expenses incurred during the research and writing process, including materials, resources, and any necessary fees, were personally managed. The author's commitment to this project ensured that

the financial aspects were effectively handled, allowing for a focused and thorough exploration of the research topic.

DATA AVAILABILITY STATEMENT

The data used in this research is available from the author upon reasonable request. The author is also willing to share the data with journals and the scientific community that may require it, thereby contributing further to the advancement of knowledge in this field.

DISCLOSURE STATEMENT

This statement affirms that the views and opinions expressed in this article are solely those of the author and do not reflect the official policies or positions of the institutions affiliated with the author; furthermore, the data presented is the result of the author's research and has not been published in any other journals.

REFERENCE

1. Despitasaki L. Dukungan Keluarga dan Pemeriksaan Payudara Sendiri (SADARI). *UM Surabaya*. 2021;2020(8):1-8.
2. Suryani Y. *Kanker Payudara*. PT.Freeline Cipta Granesia; 2020.
3. Kementerian Kesehatan. Juknis Profil Kesehatan 2022. *Kemendes RI*. 2022;(11).
4. Marfianti E. Peningkatan Pengetahuan Kanker Payudara dan Keterampilan Periksa Payudara Sendiri (SADARI) untuk Deteksi Dini Kanker Payudara di Semutan Jatimulyo Dlingo. *J Abdimas Madani dan Lestari*. 2021;3(1):25-31. doi:10.20885/jamali.vol3.iss1.art4
5. Kementerian Pemberdayaan Perempuan dan Perlindungan Anak RI. Kementerian PPPA Dorong Masyarakat Lakukan Deteksi Dini Kanker Payudara Dengan Sadari Dan Sadanis. *Kementeri PPP*. Published online 2022.
6. Oktavian. Hubungan Media Informasi Terhadap Perilaku SADARI pada Mahasiswi PSIK UMY. *Journal*. Published online 2019. <http://repository.umy.ac.id/handle/123456789/15611?show=full>
7. Sari W. Pengaruh media video terhadap pengetahuan tentang deteksi dini kanker payudara pada remaja putri di SMAN 1 Sanden Bantul Tahun 2019. *Jur kebidanan Politek Kesehat kementrian Kesehat yogyakarta*. Published online 2019:82. <http://poltekkesjogja.ac.id/>
8. Indriani T. Efektifitas Penyuluhan Kesehatan "SADARI" dengan Media Video terhadap Pengetahuan pada Remaja Putri di SMK YMJ Ciputat. *UIN Syarif Hidayatullah Jakarta*. Published online 2017:1-132.

- [http://repository.uinjkt.ac.id/dspace/bitstream/123456789/35950/1/Tiara Indriani-FKIK.pdf](http://repository.uinjkt.ac.id/dspace/bitstream/123456789/35950/1/Tiara%20Indriani-FKIK.pdf)
9. Herlinadiyaningsih. Efektivitas Media Video SADARI Terhadap Praktik SADARI pada Remaja Putri di SMK PGRI Sampit. *J Surya Med.* 2022;8(1):172-179. doi:10.33084/jsm.v8i1.3462
 10. Syakir S. Pengaruh Intervensi Penyuluhan Gizi Dengan Media Animasi Terhadap Perubahan Pengetahuan Dan Sikap Tentang Anemia Pada Remaja Putri. *ARGIPA (Arsip Gizi dan Pangan).* 2018;3(1):18-25. doi:10.22236/argipa.v3i1.2446
 11. Adila M. Pengaruh Penerapan Media cetak Berbasis Leaflet Terhadap Hasil Belajar Siswa pada Mata Pelajaran Sejarah di Kelas X SMA Negeri 1 Indralaya. *Univeristas Sriwij.* Published online 2020.
 12. Khoiriyah Mashuri D. Pengembangan Media Pembelajaran Video Animasi Materi Volume Bangun Ruang untuk SD Kelas V. *Univeristas Surabaya.* Published online 2020.
 13. Gultom FRN. Pengaruh Penkes Tentang Sadari Dengan Metode Ceramah Dan Penggunaan Leaflet Terhadap Pengetahuan Remaja Putri Di Sma Karya Budi Cileunyi. 2018;13-1:(3)العدد. <http://dx.doi.org/10.1186/s13662-017-1121-6>
<https://doi.org/10.1007/s41980-018-0101-2>
<https://doi.org/10.1016/j.cnsns.2018.04.019>
<https://doi.org/10.1016/j.cam.2017.10.014>
<http://dx.doi.org/10.1016/j.apm.2011.07.041>
<http://arxiv.org/abs/1502.020>
 14. Aeni N dkk. Pengaruh Pendidikan Kesehatan Dengan Media Video Dan Metode Demonst. *J Care.* 2018;6 (2)(2):162-174. <https://jurnal.unitri.ac.id>
 15. Shadiqah M. Faktor yang Berhubungan dengan Periksa Payudara Sendiri (SADARI) pada Remaja Putri Ma al Ikhwan Topoyo Tahun 2021. *Univeristas Hasanuddin.* Published online 2021. <http://repository.unhas.ac.id/id/eprint/16242/>
 16. Lilis DN, Suryanti dkk. Pengaruh Media Video Animasi Tentang Deteksi Dini Pemeriksaan Payudara Sendiri Terhadap Pengetahuan dan Perilaku WUS. *Jambura J Heal Sci Res.* 2022;4:35-43.
 17. Riana. Pengaruh Penyuluhan Menggunakan Media Video Melalui Whatsapp Terhadap Pengetahuan Dan Praktik Pemeriksaan SADARI. Published online 2020.
 18. Tiza Indah Asnita. Pengaruh Pendidikan Kesehatan Melalui Media Video Animasi Terhadap Pengetahuan Dan Sikap Remaja Tentang Seks Pranikah Dismp Negeri 14 Kota Bengkulu Tahun 2021. 2021;3(2):6.
 19. Datu C. Efektivitas Media Pembelajaran Audiovisual (video) Terhadap Pengetahuan Siswa Putri Tentang SADARI di SMK YPKK 2 Sleman. *UTD UGM.* Published online 2017. <https://etd.repository.ugm.ac.id/penelitian/detail/107203>

20. Nurak CE, Setiono D. Efektivitas Media Video Terhadap Tingkat Pengetahuan Pemakaian Masker Kain Dalam Pencegahan Covid-19 Pada Mahasiswa Baru Universitas Nusa Cendana. *Cendana Med J.* 2021;9(1):30-37. doi:10.35508/cmj.v9i1.4932
21. Annisaa S dkk. Pendidikan Kesehatan Menggunakan Media Video Terhadap Minat Remaja Putri Melakukan Pemeriksaan Payudara Sendiri. *J Ilmu Kebidanan.* 2023;9(2):119-124. doi:10.48092/jik.v9i2.214
22. Wijayanti NT. Efektifitas Penyuluhan Kesehatan Sadari Dengan Media Video Terhadap Pengetahuan Pada Remaja Putri Di Smk Muhammadiyah Cawas Klaten. *J Ilmu Kesehat Masy Berk.* 2020;2(1):49. doi:10.32585/jikemb.v2i1.816