COMPARISON OF THE EFFECTIVENESS OF HEALTH PROMOTION WITH LECTURE METHOD AND SMALL GROUP DISCUSSION (SGD) METHOD ON BREAST SELF-EXAMINATION (BSE) KNOWLEDGE IN ADOLESCENTS

By Khairunnisa Nabilatun Rofifah

WORD COUNT 7361
TIME SUBMITTED 11-APR-2025 10:38AM
PAPER ID 115635513

p-ISSN 2086-6380, e-ISSN 2548-7949

Jurnal Ilmu Kesehatan Masyarakat (JIKM)

COMPARISON OF THE EFFECTIVENESS OF HEALTH PROMOTION WITH LECTURE METHOD AND SMALL GROUP DISCUSSION (SGD) METHOD ON BREAST SELF-EXAMINATION (BSE) KNOWLEDGE IN ADOLESCENTS

Khairunnisa Nabilatun Rofifah[1], Nunung Siti Sukaesih[2*], Amanda Puspanditaning Sejati[3]

[1,2,3]Faculty of Nursing, University of Education Indonesia, Jl. Margamukti No.93 Licin Cimalaka Sumedang, Indonesia

*Correspondence Author: nunungss@upi.edu

ARTICLE INFO

Article History:

Received : December 23, 2024

Accepted : March 3, 2025

Published: March 17, 2025

DOI:

https://doi.org/10.26553/jikm.2025.16.1.85-104

Available online at

http://ejournal.fkm.unsri.ac.id/index.php/jikm

ABSTRACT

Breast cancer is the leading cause of death among women-related diseases. A delay in diagnosis and treatment contributes to the high fatality rate from breast cancer. Many women remain unware of BSE (Breast Self-Examination) as an early detection method for breast cancer early. Health promotion is essential to increase awareness and knowledge about early detection efforts. Two commonly used health promotion methods are lectures and Small Group Discussions (SGD). This study aimed to evaluate the effectiveness of these methods in improving adolescents' understanding of BSE. A pre-experimental study design (intact group comparison) with a two-group pre-test and post-test approach was conducted. A total of 188 participants were included in the study. Data were collected using a self-developed questionnaire designed to assess adolescents' knowledge of BSE. The Wilcoxon Signed-Rank Test was used to analyze pre-test and post-test results. The findings revealed a significant difference in the effectiveness of health promotion between the lecture method and the SGD method in enhancing BSE knowledge among adolescents, with a p-value of 0.002. While both approaches improved adolescents' understanding of BSE, the lecture method had a greater impact than the SGD method.

Keywords: Adolescents, Breast Self-Examination, health promotion lecture, knowledge, Small Group Discussion

Introduction

One of the major health issues in Indonesian society that has been increasing annually and remains the leading cause of death is the rising prevalence of non-communicable diseases [1,2] Cancer is one of the non-communicable diseases whose incidence continues to rise and can lead to death[3]. Cancer is a frightening type of disease due to its many types and relatively high cost of treatment [4]. In Indonesia, breast cancer ranks first as the leading cause of cancer-related deaths, with a total of 65,858 cases or 16.6% of all cancer cases[5]. Currently, the incidence of breast has become a major concern for many women, as it is the most common type of cancer affecting women and a leading cause of death worldwide, including in Indonesia [6].

The increase in the prevalence of breast cancer is primarily due to delays in diagnosis and treatment, leading to cases often being detected at an advanced stage [7]. If breast cancer is treated and treated late, the cancer cells will grow very rapidly and can spread to various other organs of the body commonly referred to as metastases.This can result in complications that further deteriorate the patient's health status and may ultimately lead to death [8]. In Indonesia more than 80% of breast cancer patients are found at an advanced stage due to delays in the first examination to health services [9].

Breast self-examination (BSE) is a simple and cost-effective method that women can perform independently and is one of the most recommended techniques for early detection of breast cancer [10]. BSE can be initiated during adolescence entering puberty where there are physical changes and the development of secondary sexual characteristics [11]. The development of secondary organs in adolescent girls is marked by the appearance of breast buds around the age of 10, progressing to fully developed breasts at approximately 13-14 years of age [12]. Performing BSE can reduce the mortality rate from breast cancer by 20% [13]. However, despite the many benefits and ease of practice many women in Indonesia are still reluctant to perform BSE [14]. The low awareness of early breast cancer detection is primarily due to a lack of knowledge, which is influenced by limited access to information about breast cancer and the benefits of early detection [15].

Information to enhance knowledge can be obtained from various sources, one of which is through health promotion [16]. According to Notoatmodjo, health education in the form of health promotion is one way to influence the health behavior of individuals, groups or a community [17]. The most popular approach to health promotion is the lecture method, which involves giving information orally. However, However, another effective method is the Small Group Discussion (SGD) approach, which provides participants with greater opportunities to express their opinions, draw conclusions, and propose alternative solutions to issues [18]. Previous studies on health promotion related to BSE knowledge have demonstrated that the lecture method effectively increases knowledge after the intervention [19,20,21]. Similarly, research utilizing the Small Group

Discussion method has shown comparable results, with a significant improvement in knowledge following health promotion through this approach [22,23].

The lecture method of health promotion involves the oral delivery of information to an audience, typically in a group setting, to convey key messages effectively [24]. Meanwhile, the health promotion The Small Group Discussion (SGD) technique is a tutorial small group discussion that involves seven leaps, from case emphasis to issue solving. The seven -step process includes; step 1, clarify foreign terminology; step 2, define the problem; step 3, brainstorm; step 4, analyze the problem; step 5, formulate learning problems; step 6, self-study and step 7, reporting [25].

The health problems of school aged children are often overlooked by schools, parents, and healthcare practitioners, as the primary focus remains on toddler health [14]. Despite the complexity and diversity of health issues that school-age children, implementing health promotion strategies is essential in preventing these problems [26,27]. According to RISKESDAS data from the Indonesian Ministry of Health, there are around 17,000 cases of childhood cancer in Indonesia each year and the number is increasing[28]. More than 50% of childhood cancer cases are only detected at an advanced stage, highlighting the critical need for health promotion efforts among school-age children [29]. One of the most important health promotions is BSE as breast cancer patients are increasingly being diagnosed in adolescent girls. Some cases even involve 14-year-old girls with breast tumors, which, if not detected early, could develop into cancer [30].

Based on preliminary studies conducted by researchers through interviews with junior high school teachers related to health promotion regarding BSE, the results showed that so far no one has health promotion activities related to BSE had been conducted in junior high schoolsAs a result, female students were unaware of BSE, its benefits, and how to perform it. Health promotion plays a crucial role in shaping BSE behavior among adolescent girls as part of breast cancer prevention, as it provides essentialinformation and understanding about BSE [31]. Based on these finfings all junior high schools presented potential research sites. Therefore, the researchers selected SMPN 1 Cimalaka and SMPN 2 Cimalaka in Sumedang Regency as study locations.

SMPN 1 Cimalaka and SMPN 2 Cimalaka are public schools located in Cimalaka District, Sumedang Regency. Previous research has shown that health promotion using both the lecture method and the Small Group Discussion method significantly improves adolescents'knowledge of BSE [19–23]. However, based on the preliminary study conducted by the researchers, many adolescents remain unaware of BSE, and there are still limited studies comparing these two health promotion methods. Therefore, this study aims to compare the effectiveness of the lecture method and the Small Group Discussion method in increasing adolescents' knowledge of BSE.

Methods

This research employed a quantitative approach. The study design followed a pre-experimental design (group intact comparison). Repeated measurements (pre-test and post-test) were conducted, involving two intervention groups. Before receiving the intervention, initial measurements were taken, followed by post-intervention measurements to assess the impact of the treatment. To determine the treatment effect, the post-test results were compared with the pre-test results[32].

The study was conducted at SMPN 1 Cimalaka and SMPN 2 Cimalaka, both located in Sumedang Regency, West Java. These schools share similar characteristics, including the number of female students, which met the minimum sample requirement for the study. Additionally, both schools had facilities that supported the intervention, such as classrooms, internet access, and a projector (Infocus). Since both schools are in the same sub-district, they shared similar social and cultural backgrounds.

This study employed a purposive sampling technique, selectingschools that had never received counseling on BSE. The selection of interventions for each school was determined by the researcher randomly. SMPN 1 Cimalaka received a health promotion intervention using lecture method and SMPN 2 Cimalaka was given health promotion intervention using small group discussion method.

The sample size was determined using G*Power 3.1 software based on the research design. In the parameter input column, the researcher used one-tail with an effect size of 0.5 alpha level (α) 0.05. The results obtained based on these parameters with a standard strength of 95% are 176 respondents who are divided into 2 intervention groups so that the number of samples given the lecture intervention is at least 88 people and the number of samples given the Small Group Discussion (SGD) intervention is at least 88 people. Based on the results of the minimum sampling, then in this study obtained a sample of 93 students given a lecture intervention and 95 students given an intervention in the form of Small Group Discussion (SGD).

A questionnaire developed by the researcher was used as the research instrument to assessparticipants' knowledge of breast self-examination (BSE) and validated and reliable before to usage serves as the research tool in this study. The initial number of questions consisted of 30 questions, but after the validity test there were 2 invalid questions so that the number of questions on this questionnaire consisted of 28 questions with Multiple Choice Questions (MCQ) or multiple choice answers, where the respondent will determine the answer that is considered correct from the options provided. This study employed theguttman scale,a measurement scale that provides clear, firm and consistent responses. In this scale, responses are scored dichotomously, with the highest possible score being 1 (for correct answers) and 0 (for incorrect answers)[33].

The health promotion media used in this study were PowerPoint presentationsand leaflets. Leaflets were distributed to all respondents, namely lecture group respondents and SGD group respondents while the PowerPoint was only used in the group with lecture intervention. The power point in this study has 20 slides which presented only when delivering health promotion using the lecture method. The material presented includes the definition of breast cancer, risk factors for breast cancer, symptoms of breast cancer, understanding BSE, benefits of BSE, starting to perform BSE, the appropriate time to perform BSE and how to perform BSE. Power points and leaflets developed by researchers.

Research Procedure

The research was conducted from August 2024 to September 2024. This research was conducted through 9 stages with the following description:

1. First stage

   The research began by determining the research problem and conducting a preliminary study to collect data supporting the research by means of a literature review.

2. Second stage

   After that, determine the research sample from early adolescents in Sumedang Regency. Researchers selected 2 schools using purposive sampling with the criteria of junior high schools that had never received health counseling about BSE. After that, the determination of intervention delivery was carried out randomly. Based on the spin random results, SMPN 1 Cimalaka was given an intervention in the form of health promotion using the Small Group Discussion method and SMPN 2 Cimalaka was given an intervention in the form of health promotion using the lecture method. From each junior high school, a minimum of 88 junior high school students aged 12-15 years (early adolescents) will be selected as the intervention group with the lecture method and 1 other junior high school will be the intervention group with the Small Group Discussion method.

3. The third stage

   After the research subjects are selected, it will be continued with research permits and explanations of research to teachers and principals.

4. Fourth stage

   At this stage, researchers prepared health promotion interventions with materials and media tailored to the needs of the study. In addition, researchers also looked for several volunteers to become facilitators in the SGD group. The criteria for selecting facilitators are nursing students who are currently taking 7th semester lectures and have conducted SGD. After the facilitator is selected, the researcher will first give direction to the facilitator.

5. Fifth stage

At this stage, the research subjects were given an explanation of the purpose and objectives of the research and the intervention, the time contract for providing the intervention and mentioning the material to be discussed when providing the intervention. After the respondent understood the explanation of this research, the research subject was given written informed consent and the research subject voluntarily had the right to be willing or unwilling to participate in research activities. After obtaining consent from the respondents, the researcher divided the SGD respondents into several groups containing a maximum of 10 people in each group. The determination of the number of groups is based on the ideal number of groups in the SGD method, which is 3-10 people with consideration for the effectiveness of the discussion [34].

6. Sixth stage

   The first research conducted was health promotion using the SGD method at SMPN 1 Cimalaka. According to Wood, the discussion process in groups can use a seven-step (seven jump) approach [35]. Seven jump in SGD will be divided into 2 meetings. At this stage is the first SGD meeting which discusses steps 1-5.

   This first meeting began by distributing research questionnaires in the form of a pre-test which was filled in by self-assessment for approximately 15-30 minutes. After that, the facilitator opened greetings to their respective groups and discussed with their members to choose the group leader and secretary. After the group leader and secretary were selected, the case scenario about BSE was distributed and read. After all respondents understood the case given, it was continued with the implementation of SGD starting from step 1, namely equalizing perceptions and understanding together the problems in the scenario for 15 minutes, followed by step 2, namely defining problems through a list of questions for 15-30 minutes, followed by step 3, namely identifying and devoting knowledge or opinions that have been owned for 15 minutes, then continued with step 4, namely analyzing problems in a structured manner for 30 minutes, and continued with step 5, namely formulating learning objectives and distributing tasks among group members for 30 minutes. After steps 1-5 were conducted, the first meeting of the SGD group was completed and ended with respondents taking their questionnaires home. The questionnaire was taken home to conduct step 6, which is an individual learning activity or information search process using relevant literature.

7. The seventh stage

   At this stage, respondents will gather again at the second meeting with the SGD intervention to carry out step 7 where respondents will discuss the results of the literature that has been studied. After the discussion is complete, the respondents are given a post-test in the form of a questionnaire filled in by self-assessment for approximately 15-30 minutes.

8. Eighth stage

This stage is the stage of implementing health promotion with the lecture method carried out at SMPN 2 Cimalaka. The lecture method was conducted for 2 meetings. Before starting health promotion with the lecture method, researchers gave a pre-test to respondents to be filled in by self-assessment for approximately 15-30 minutes. Furthermore, the implementation of health promotion using the lecture method for 40 minutes using power point media which contains material about the definition of breast cancer, risk factors for breast cancer, symptoms of breast cancer, understanding BSE, the benefits of BSE, starting to do BSE and the time to do BSE. After that, the first meeting in the lecture group ended with a question and answer session if there were respondents who wanted to ask questions.

9. Ninth stage

   At this stage, the lecture method will be carried out once more for 40 minutes using power point media containing material on how to do BSE and continued with a question and answer session if any respondents want to ask. After the lecture method is carried out for 2 meetings, a post-test in the form of a questionnaire will be filled in by respondents with a lecture intervention which will be filled in by self-assessment for approximately 15-30 minutes.

The validity test of this study was conducted on July 9, 2024 on students of SMP Negeri 1 Cimalaka. In testing the validity of all statements in the questionnaire tested using Pearson Product-moment correlation. In this research questionnaire consisting of 30 questions, there were 14 invalid questions and 1 question that could not be analyzed, so the researcher decided to revise these questions and then re-tested the validity of all research respondents. After testing the validity of all respondents, it was found that 2 questions were invalid, namely numbers 3 and 25. In this study, invalid questions will be discarded or not used so that the questionnaire used in this study has 28 questions.

The reliability test of the questionnaire in this study was carried out with the help of computer software using the Cronbach Alpha model. A variable is said to be reliable or consistent in measuring if the Cronbach Alpha value is > 0.60 (Anggraini et al., 2022). The instrument in this study has been tested for reliability and obtained a reliability result of 0.721 so that it can be said that this research instrument can be trusted.

In this study, data processing used computerized methods with the help of JASP 0.18.3.0 and SPSS 24.0. The Wilcoxon Signed Rank Test was used to analyze the data obtained from the pre-test and post-test questionnaires because they were not normally distributed. To determine whether there is a difference between the lecture pre-test and the Small Group Discussion pre-test, the Independent Samples T-Test test was used. Because there is a difference between the lecture pre-test and the Small Group Discussion pre-test, the data will be analyzed using N Gain. Data analysis

to compare the effectiveness between the lecture method and the Small Group Discussion method will use the Mann Whitney test because the data is not normally distributed with p-value <0.001. This study received ethical approval fromthe ethics committee of Ngudi Waluyo University on September 11, 2024 with ethics number 3/KEP/EC/UNW/2024.

Research Flow

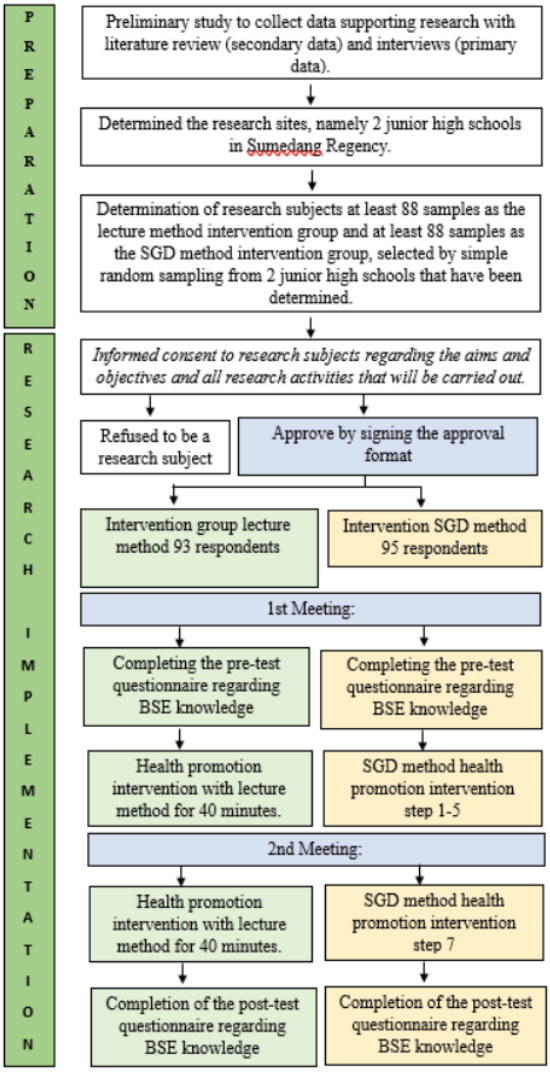

Figure 1. Research Flow

Results

Respondents with lecture intervention aged 13 years were 58 people (62.4%), respondents aged 14 years were 34 people (36.6%) and respondents aged 15 years were 1 person (1.1%) based on figure 2. While respondents with Small Group Discussion intervention aged 12 years were 2 people (2.1%), respondents aged 13 years were 58 people (61.1%), respondents aged 14 years were 32 people (33.7%) and respondents aged 15 years were 3 people (3.2%) based on figure 2. The data shows that in both intervention groups most respondents are 13 years old.

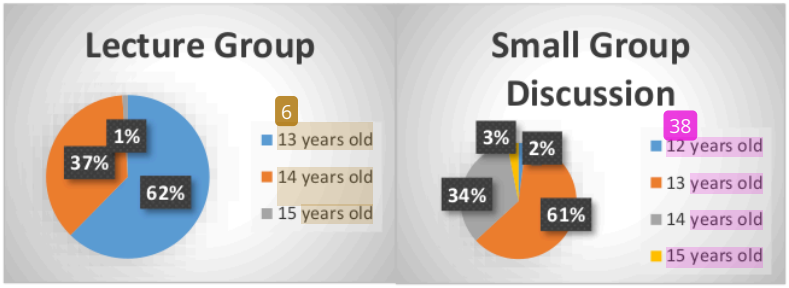

Figure 2. Demographic data of the lecture group and small group discussion by age

Table 1 presents the descriptive frequency analysis of data describing the characteristic results of the research variables, specifically the level of knowledge of female students before and after they were given health promotion regarding BSE using the lecture method and the Small Group Discussion method.

Table 1. Level of Knowledge Before and After Health Promotion with Lecture Method and Small Group Discussion method regarding BSE in adolescents (n = 188)

No.	Level of Knowledge	Lecture Group				Small Group Discussion				Total			
		Pre-test		Post-test		Pre-test		Post-test		Pre-test		Post-test	
		F	%	F	%	F	%	F	%	F	%	F	%
1.	Less knowledge	75	80.6	18	19.4	54	56.8	24	25.3	129	68.6	42	22.3
2.	Moderate knowledge	16	17.2	47	50.5	34	35.8	41	43.2	50	26.6	88	46.8
3.	Good knowledge	2	2.2	28	30.1	7	7.4	30	31.6	9	4.8	58	30.9
Total		93	100	93	100	95	100	95	100	188	100	188	100
Mean		1.2151		2.1075		1.5053		2.0632		1.3617		2.0851	
Standar Deviasi		0.46273		0.69879		0.63369		0.75527		0.57303		0.72628	

Based on table 4.1, It may be concluded that all respondents, including up to 129 students (68.6%), had a generally low level of understanding prior to receiving health promotion, as many as 50 students (26.6%) who had sufficient knowledge and as many as 9 students (4.8%) who had good knowledge about BSE. Then after being given health promotion about BSE, the respondents' knowledge was measured again and the results showed that 42 students (22.3%) had good

knowledge, 88 students (46.8%) had sufficient knowledge and as many as 58 students (30.9%) had poor knowledge about BSE.

The level of knowledge of respondents in the health promotion group with the lecture method mostly had poor knowledge, namely as many as 75 students (80.6%), as many as 16 students (17.2%) who had sufficient knowledge and as many as 2 students (2.2%) who had good knowledge about BSE. Then after being given health promotion about BSE with the lecture method, the respondents' knowledge was measured again and the results showed that 28 students (30.1%) had good knowledge, 47 students (50.5%) had sufficient knowledge and as many as 18 students (19.4%) had poor knowledge about BSE.

Prior to receiving health promotion via the Small Group Discussion approach, the majority of respondents in the Small Group Discussion intervention group had inadequate understanding, namely as many as 54 students (56.8%), as many as 34 students (35.8%) who had sufficient knowledge and as many as 7 students (7.4%) who had good knowledge about BSE. Then after being given health promotion about BSE with the Small Group Discussion method, the respondents' knowledge was measured again and the results showed that 30 students (31.6%) had good knowledge, 41 students (43.2%) had sufficient knowledge and as many as 24 students (25.3%) had poor knowledge about BSE.

Table 2. Knowledge before and after health promotion using lecture and Small Group Discussion on BSE among adolescents (n = 188)

Variabel	Lecture Group			Small Group Discussion			p-value
	Mean	SD	Min-Max	Mean	SD	Min-Max	(independent t-test)
BSE knowledge (Total score 100)							
Pre-test	43.510	13.955	17.8 - 70.5	52.626	17.596	10.7 - 96.4	
Post-test	66.322	17.812	35.7 - 89.2	67.323	16.517	21.4 - 92.8	<.001
Difference	22.812			14.697			
Uji Wilcoxon (Paired t-test)	<.001			<.001			
N-Gain							
Post-test	0.400	0.271	(-0.388) - (0.822)	0.277	0.345	(-2) - (0.832)	0.002

Table 2 shows that before the intervention with the lecture method, the respondents' BSE knowledge was at an average value of 43.510. While in the Small Group Discussion method intervention group, respondents' BSE knowledge was at an average value of 52.626.

The pre-test value of lecture with a mean of 43.510 and the pre-test value of Small Group Discussion with a mean of 52.626 so that there is a significant difference between the pre-test value of the lecture group and the Small Group Discussion group (p-value <.001). Because there is a difference between the pre-test value of the Lecture group and the pre-test value of the Small Group Discussion group, then to measure the effectiveness between the two health promotion methods, a different test is carried out using the N-Gain value as shown in table 2.

The average post-test score of the respondents increased by 22.322 following the lecture technique intervention, bringing the total score of the respondents to 66.322. The average score of respondents following the Small Group Discussion technique intervention was 67.323, but the mean score of the respondents' post-test increased by 14.697 in the Small Group Discussion method intervention group.

Analysis of the pre-test and post-test results using the Wilcoxon rank test revealed a substantial increase in BSE knowledge in the group receiving lecture intervention with a p-value <.001 (<0.005). Analysis using the Wilcoxon rank test on the pre-test and post-test in the group with Small Group Discussion intervention there was also a significant increase in knowledge about BSE with a p-value <.001 (<0.005).

The post-test difference between the two groups was analyzed using the Mann Whitney test to get a value of p=0.002 (p<0.05), which shows there is a difference between the lecture method group and the Small Group Discussion method group on BSE knowledge in adolescents. This means that H1 is accepted, there is a difference between the lecture method and the Small Group Discussion method on BSE knowledge in adolescents.

The results of the analysis showed that the intervention with the lecture method had an N-gain = 0.400. While the intervention with Small Group Discussion method has N-Gain = 0.277. Based on these findings, it can be said that the lecture approach is more effective than the small group discussion method in promoting health and increasing teenagers' knowledge about BSE. The lecture method's N-Gain value is higher than the small group discussion's.

Discussion

Respondents' knowledge about BSE before the intervention in the form of health promotion with the lecture method and the Small Group Discussion method was 68.6% in the poor category. This is supported by the results of research conducted by Handayani and Sudarmiati which states that respondents who have less knowledge about BSE procedures mostly (60.65%) have a junior high school education level and are in the early adolescent phase. Junior high school is a basic education where BSE has not been included in the learning curriculum at school so that information about the BSE procedure has not been obtained by respondents and in the early adolescent phase the ability to digest and process information from outside is still limited, causing knowledge about the BSE procedure to be lacking [37]. One of the factors for the lack of information in adolescents about BSE is the absence of counseling or health education from competent health workers in their fields [38].

The mean values of respondents' pre health promotion knowledge of BSE varied between the lecture group and the small group discussion group. The mean value of BSE knowledge was higher in the Small Group Discussion group than in the lecture group. Because the two groups have

different mean values in the pre-test, it will affect the further analysis process so that data analysis to determine the effectiveness comparison of the two groups cannot be directly analyzed by distinguishing between the lecture post-test and the Small Group Discussion post-test but must use N-Gain. N-gain is a test used to determine the increase in scores in a sample class in research. In the N-gain test, the average score of the initial data, namely the pre-test and the final data score, namely the post-test, will be compared and tested for improvement [39].

The pre-test results in the lecture group showed that most of the students had insufficient knowledge about BSE, but after being given health promotion with the lecture method, students with insufficient knowledge about BSE decreased so that students with sufficient and good knowledge about BSE increased. Given that the pre-test and post-test findings showed an increase in knowledge, it can be said that health counseling delivered using the lecture technique can raise respondents' level of understanding. This is consistent with studies by Istiani and Rokhmiati showing that early teenage girls at Gelora Depok Junior High School can learn more about BSE through the lecture technique [40]. The research by Sukmawati et al., which found that the lecture approach can raise teenagers' BSE knowledge with an average increase value of 15.8%, is another study that backs up this claim [41]. This research is also supported by research conducted by Noviani and Anggraini that there is an increase in knowledge about BSE after health promotion using the lecture method in adolescent girls [42]. The lecture technique is a health promotion strategy that involves delivering oral communications to an audience of people in order to inform them [24]. For all targets, both highly and lowly educated, the lecture style works incredibly well [43].

The pre-test results of the Small Group Discussion group showed that most of the students had insufficient knowledge about BSE, but after being given health promotion with the Small Group Discussion method, students with insufficient knowledge about BSE decreased so that students with sufficient and good knowledge about BSE increased. Given that the pre-test and post-test results showed an increase in knowledge, it can be said that the Small Group Discussion technique of health counseling can raise respondents' level of understanding. This is consistent with studies by Masturo et al. showing that women of reproductive age can enhance their BSE knowledge and attitudes through the group discussion method [44]. The study's findings are consistent with those of a study by Ayu and Patimah that found that the group discussion method can increase teenage girls' knowledge of BSE. Prior to receiving BSE health promotion, their knowledge was primarily in the moderate category (42.9%), and following BSE health promotion, their knowledge was primarily in the good category (76.2%) [45]. Another study that supports this research is the results of research conducted by Ananda that there are differences in the knowledge of adolescents at SMPN 2 Pontianak before and after health promotion with the Small Group Discussion method [22]. Small Group Discussion (SGD) is a small group discussion (tutorial) which is the core of Problem Based Learning (PBL) [46]. Small Group Discussion is an approach that is

carried out on each individual to work together and share experiences in small groups [47]. Small Group Discussion aims to discuss and express their opinions with small groups. Discussion is one of the elements of active learning [48].

Adolescents' understanding of BSE can be greatly increased through health promotion techniques like as lectures and small group discussions, but based on the results of the mean N-Gain value, health promotion using the lecture method is more effective in increasing adolescents' knowledge about BSE than health promotion using the Small Group Discussion method with a p-value of 0.002. If the speaker is proficient in the content they will be presenting, health promotion through lectures will be successful [49]. Lecture method health promotion has several advantages among other health promotion methods, including; cheap and easy to use, the time required can be controlled by the extension agent, can be accepted by targets who cannot read and write and the extension agent can explain by emphasizing important parts [24].

This study differs from one by Suryani on the Effect of Lecture and Group Discussion Methods on Adolescent Adherence to Consuming Blood-Additive Tablets, which discovered that the group discussion method is the most successful health promotion strategy for boosting teenage girls' compliance in taking blood-added tablets [50]. Group discussions bring good benefits to trainees, namely active interaction between group members and with the community service team. In addition, group discussions open up a broader understanding and knowledge of trainees, improve teamwork, are free to express opinions and accept the opinions of others, and hone the ability of trainees to analyze problems and find solutions [51]. In the context of learning, most learners actively participate, share responsibilities, and respect the views of other group members, although some still lack collaboration or are reluctant to accept different points of view [52]. The results of research conducted by Saputriet al. said that the obstacles in implementing Small Group Discussions include variations in students' knowledge, experience, and interests during discussions, participation of introverted, quiet, or apathetic students in discussions, students' constraints in articulating ideas or opinions scientifically and systematically, and time constraints to conduct discussions efficiently [53]. This is in line with the results of research conducted by Afni & Ekarini through interviews and there was one participant who mentioned his hope that the seven jump was eliminated because it was considered ineffective and only a few active students [54].

This study is also not in line with research conducted by Rizqiyah on the Effectiveness of Sexual and Reproductive Health Education with Lecture and Small Group Discussion Methods on the Level of Knowledge and Attitudes of Adolescents aged 16-17 years, the results showed that the Small Group Discussion method is better used to increase knowledge about reproductive health in adolescents than the lecture method [30]. Factors that can cause differences in research results between previous studies and this study are age factors. Respondents in Rizqiyah's 2017 study were 16-17 years old while respondents in this study were 12-15 years old. This is supported by a

literature review conducted by Apsari et al., 2021 which states that there are differences in the results of the difference in the average knowledge scores of research respondents by Tarigan and Lubis due to differences in the age of respondents from the two studies [55]. The selection of health education methods depends on several factors, namely the characteristics of the target or participants such as number, economic status, age and gender; available time and place; and the specific objectives to be achieved by health education such as changes in knowledge, attitudes, or practices of participants [56].

The Small Group Discussion method with the seven jump approach produces many positive impacts, including training independence, responsibility and learning to be a leader [57]. However, the Small Group Discussion method with a seven jump approach has 5 obstacles, namely long time, student activeness, discussion not on topic, lack of understanding, and lack of socialization [54]. Based on the results of research conducted by Prasandha & Utomo regarding the evaluation of basic teaching skills of students in the teaching campus program, 5% of respondents stated that they rarely divided students into small groups so that the method often used was the lecture method [58,59].

The lecture method is considered effective for listeners of more than ten people, but boredom often arises if the material we convey is less interesting and too long according [60]. To prevent this, this study used the lecture method with powerpoint slide media. The media is considered quite effective because powerpoint slide media has several advantages, including an attractive presentation because there are variations in color, font, text animation and image or photo animation, thus stimulating students to find out more about the information presented [61]. Based on this, the nursing profession can conduct health promotion in adolescents using lecture methods accompanied by attractive media, one of which is powerpoint slides. Although in this study the lecture method of health promotion was more effective, the nursing profession can also implement health promotion using the SGD method because it can still increase adolescents' knowledge about BSE. The differences between the results of this study and previous studies make limitations in this study.

Conclusion

Based on the results of research on the comparing the effectiveness of health promotion of the lecture method and the Small Group Discussion (SGD) method regarding BSE in adolescents at SMPN 1 Cimalaka and SMPN 2 Cimalaka, it can be concluded that there are differences in the effectiveness of health promotion of the lecture method with health promotion of the Small Group Discussion method regarding BSE knowledge in adolescents. Both lecture method health promotion and SGD method health promotion can increase adolescents' knowledge about BSE. However, when comparing the effectiveness of the lecture method health promotion and the SGD

method health promotion in increasing adolescents' knowledge about BSE, the lecture method health promotion is more effective than the SGD method health promotion with seven jumps in increasing adolescents' BSE knowledge. Based on the results of this study, further research is recommended to examine the Small Group Discussion method which is suitable for adolescents at the junior high school level with different techniques.

Acknowledgement

The authors express their gratitude to all participants who willingly took part in this study, which wasconducted in September 2024.

Funding

This research received no external funding and was conducted in September 2024.

Conflict of Interest

The authors declare that there was no conflict of interest in the writing of this manuscript.

Reference

1. Marfianti E. Peningkatan Pengetahuan Kanker Payudara dan Ketrampilan Periksa Payudara Sendiri (SADARI) untuk Deteksi Dini Kanker Payudara di Semutan Jatimulyo Dlingo. J Abdimas Madani dan Lestari. 2021;3(1):25–31.
2. Kurniasih H, Purnanti KD, Atmajaya R. Pengembangan Sistem Informasi Penyakit Tidak Menular (Ptm) Berbasis Teknologi Informasi. J Teknoinfo. 2022;16(1):60.
3. Hero SK. Faktor Resiko Kanker Payudara. J Med Hutama. 2021;03(01):402–6.
4. Sipayung ID, Lumbanraja S, Fitria A, Silaen M, Sibero JT. Analysis of Associated with Breast Cancer (Ca Mammae) at dr Pirngadi Hospital Medan in 2020. J Heal Technol Med. 2020;8(1):468–76.
5. Kementerian Kesehatan. Kanker Payudara Paling Banyak di Indonesia, Kemenkes Targetkan Pemerataan Layanan Kesehatan [Internet]. 2022 [cited 2024 Jul 19]. Available from: https://kemkes.go.id/id/rilis-kesehatan/kanker-payudaya-paling-banyak-di-indonesia-kemenkes-targetkan-pemerataan-layanan-kesehatan
6. Nurleli N, Mardhiah A, Hanum L. Deteksi dini faktor resiko kanker payudara pada wanita di wilayah kerja Puskesmas Batoh Banda Aceh. J SAGO Gizi dan Kesehat. 2022;3(1):1.
7. Sofa T, Wardiyah A, Rilyani. Faktor Risiko Kanker Payudara Pada Wanita. J Penelit Perawat Prof. 2024;2(5474):1333–6.
8. Yuhanah Y, Nuridah N, Yodang Y. Pemberdayaan Kader Kesehatan Dalam Skrining dan

Deteksi Dini Kanker Payudara Melalui Breast Self-Examination. J Penelit dan Pengabdi Kpd Masy UNSIQ. 2019;6(3):143–9.

9. Dyanti GAR, Suariyani NLP. Faktor-Faktor Keterlambatan Penderita Kanker Payudara Dalam Melakukan Pemeriksaan Awal Ke Pelayanan Kesehatan. J Kesehat Masy. 2016;11(2):276.
10. Kinasih K, Wahyu Wigati P, Studi Kebidanan P, Ilmu Kesehatan F, Kadiri U. Hubungan Antara Pengetahuan Dengan Pelaksanaan Pemeriksaan Payudara Sendiri (SADARI) Pada Remaja Putri di Kelurahan Uluindano Kota Tomohon Tahun 2023 The Relationship Between Knowledge and the Implementation of Breast Self-Examination (BSE) Among Young Wo. J Mhs Kesehat. 2024;5(2):169–70.
11. Saputra AU, Mulyadi B, Banowo BS. Systematic Review: Efektivitas Beberapa Metode Pendidikan Kesehatan Program Pencegahan Kanker Payudara terhadap Pengetahuan, Sikap dan Tindakan Remaja tentang Sadari. J Keperawatan Kel Persat Perawat Nas Indones. 2021;9(2):365–80.
12. Dewi M, Ulfah M. Buku Ajar Remaja dan Pranikah. Malang: UB Press; 2021.
13. Rahayu D, Yunarsih Y. Peer Support Groups Dalam Peningkatan Perilaku Pemeriksaan Payudara Sendiri (Sadari). Indones J Heal Sci. 2021;5(2):92–8.
14. Yulinda A, Fitriyah N. Efektivitas Penyuluhan Metode Ceramah Dan Audiovisual Dalam Meningkatkan Pengetahuan Dan Sikap Tentang Sadari Di Smkn 5 Surabaya. J Promkes. 2018;6(2):116–28.
15. Sarina S, Thaha RM, Nasir S. Faktor yang Berhubungan dengan Perilaku Sadari Sebagai Deteksi Dini Kanker Payudara pada Mahasiswi FKM Unhas. Hasanuddin J Public Heal. 2020;1(1):61–70.
16. Oktavia DR, Roulita, Simamora RS. Pengaruh Promosi Kesehatan Menggunakan Media Video terhadap Tingkat Pengetahuan Remaja Putri tentang Sadari. J Penelit Perawat Prof. 2024;6(3):1309–16.
17. Prihati DR, Wirawati MK, Endang S. Promkes Perilaku CERDIK Untuk Pencegahan Kanker Pada Kelompok Guru Bina Amal Semarang. [Jurnal Kreat Pengabdi Kpd Masy. 2021;13(2):129–41.
18. Harefa K, Utama I, Brahmana NE, Wandra T, Sitorus MEJ, Siagian MT, et al. Pengaruh Penyuluhan Dengan Metode Ceramah Terhadap Peningkatan Perilaku Pengobatan Pasien Tuberkulosis Di Puskesmas Lotu Tahun 2023. Prepotif J Kesehat Masy. 2023;7(3):16062–71.
19. Kumala RN, Ruspita M, Ulfiana E. Perbedaan Tingkat Pengetahuan dan Sikap Remaja Putri Pada Pemberian Pendidikan Kesehatan Sadari Dengan Metode Demonstrasi dan Ceramah. Midwifery J. 2022;III(1):36–50.

20. Sumarni N, Rosidin U, Sumarna U, Sholahhudin I. Cegah Kanker Payudara Sejak Dini Dengan Melakukan SADARI Di SMA Al-Ma'soem. J Kreat Pengabdi Kpd Masy. 2023;6(5):1916–25.
21. Apriani LA, Lestari MA, Ismiati I, Wiguna RI. Pencegahan Kanker Payudara melalui Edukasi Kesehatan SADARI pada Siswi Madrasah Aliyah Qamarul Huda. J Abdimas Kesehat. 2023;5(1):103.
22. Ananda V, Fahdi FK, Fujiana F. Pengaruh Promosi Kesehatan Periksa Payudara Sendiri Dengan Metode Small Group Discussion Terhadap Tingkat Pengetahuan Remaja Di SMP Negeri 2 Pontianak. ProNers. 2022;11(1):1–5.
23. Wulandari T, Nuryani, Nugroho SW, Suparji. Efektifitas Pendidikan Kesehatan dengan Metode Small Group Discussion untuk Meningkatkan Keterampilan dan Perilaku Siswi. Glob Heal Sci. 2022;7(3):2622–1055.
24. Siregar PA, Harahap RA, Aidha Z. Promosi Kesehatan Lanjutan Dalam Teori dan Aplikasi. 1st ed. Kencana. Jakarta; 2020.
25. Timiyatun E, I Made Moh. Yanuar, Uut Dewi Asrifah, Eka Oktavianto. The Effective Small Group Discussion to Improve Adolescent Knowledge on HIV/AIDS Prevention. Caring Indones J Nurs Sci. 2021;3(1):38–46.
26. Indawati L, Adijaya N, Dewi DR, Ilhami BF. Rekam Kesehatan Personal Pada Anak Usia Sekolah Sebagai Kunci Sukses Pemberdayaan Kesehatan Siswa. Educivilia J Pengabdi pada Masy. 2021;2(1):73.
27. Sholihah NA, Sakinah S. Buku Ajar Promosi Kesehatan dan Ilmu Perilaku Kesehatan. Penerbit NEM; 2022.
28. Tiala NH, Tampubolon NR, M.Abu, Afridelinsari YE. Penerapan Terapi Akupresur Terhadap Mual Muntah Post Kemoterapi Pada Anak Kanker : Literature Review Acupressure. J Sk Keperawatan | Vol 9, No 1 | Jan – Jun 2023. 2023;9(1):114–23.
29. ICCC. Kanker Pada Anak [Internet]. Indonesia Cancer Care Community. Available from: https://www.iccc.id/kanker-pada-anak
30. Angrainy R. Hubungan Pengetahuan, Sikap tentang Sadari dalam mendeteksi Dini Kanker Payudara pada Remaja. J Endur. 2017;2(2):232–8.
31. Haque BR, Nurviani D. Hubungan Pendidikan Kesehatan Periksa Payudara. 2023;4:5474–80.
32. Pakpahan AF, Prasetio A, Negara ES, Gurning K, Situmorang RFR, Tasnim T, et al. Metodologi Penelitian Ilmiah. Yayasan Kita Menulis; 2021.
33. Yudiandari AC. Pengembangan Buku Digital Interaktif "Mendidik Anak Generasi Z." Prodi Teknol Pendidik. 2018;7(8):13–8.
34. Riadi M. Model Pembelajaran Small Group Discussion [Internet]. Kajian Pustaka. 2023.

Available from: https://www.kajianpustaka.com/2023/02/model-pembelajaran-small-group-discussion.html

35. Adjunct, Marniati. Promosi Kesehatan. 1st ed. Depok: PT Rajagrafindo Persada; 2021.
36. Anggraini FDP, Aprianti A, Setyawati VAV, Hartanto AA. Pembelajaran Statistika Menggunakan Software SPSS untuk Uji Validitas dan Reliabilitas. J Basicedu. 2022;6(4):6491–504.
37. Handayani, Sri., & Sudarmiati S. Pengetahuan remaja putri tentang cara melakukan sadari pendahuluan kanker payudara yang juga disebut dengan ca mamae merupakan pertumbuhan sel payudara yang tidak terkontrol karena terjadi perubahan abnormal dari gen yang berperan komunikasi publik setjen. J Nurs Stud. 2012;1:93–100.
38. Hadiyah N, Dewi RK, Sutrisni S. Hubungan Sumber Informasi Terhadap Pengetahuan Sadari Pada Remaja Putri. J Mhs Kesehat. 2020;2(1):53.
39. Lestari R. Keefektifan Model Number Head Together Dan Problem Based Learning Berbasis Literasi Matematis Terhadap Hasil Belajar Matematika Siswa Kelas II SDN Gugus Pangeran Diponegoro Tegowanu Grobogan [Internet]. Universitas Negeri Semarang; 2020. Available from: http://lib.unnes.ac.id/id/eprint/40371
40. Istiani HG, Rokhmiati E. Promosi Kesehatan Tentang Perilaku Genital HygieneDan Periksa Payudara Sendiri (SADARI) Pada Usia Awal Remaja Puteri. Pros Semin Nas Masy Tangguh. 2024;3(1):90–6.
41. Sukmawati I, Kusumawaty J, Nurapandi. Adi, Lestari DA, Novianty E, Rahyu Y. Pendidikani Kesehatan Dengan Metode Ceramah Dan Audio Visual Terhadap Pengetahuan Pemeriksaan Payudara Sendiri (Sadari). Healthc Nurs J. 2022;4(2):333–41.
42. Noviani A, Anggraini Y. Peningkatan Edukasi Pemeriksaan Payudara Sendiri (SADARI) Pada Remaja Putri. J Pengabdi Masy. 2023;5(2):6–12.
43. Yuliana D, Sutisna I. Pengaruh Pendidikan Kesehatan Ceramah Terhadap Tingkat Pengetahuan Remaja Tentang Kesehatan Reproduksi Di SMP Negeri 2 Tanjungsari Sumedang. J Keperawatan Komprehensif. 2017;3(1):45–51.
44. Masturo U, Kholisotin K, Agustin YD. Efektifitas Penyuluhan Kesehatan Tentang SADARI dengan Metode Diskusi Kelompok dan Metode Demonstrasi terhadap Perilaku WUS dalam Melakukan SADARI. Citra Delima J Ilm STIKES Citra Delima Bangka Belitung. 2019;3(2):141–54.
45. Ayu WD, Patimah P. Implementasi Pendidikan Kesehatan Dengan Metode Diskusi Kelompok Terhadap Pengetahuan Remaja Putri Tentang Pemeriksaan Payudara Sendiri (sadari) Sebaga Deteksi Dini Kanker Payudara Di Blok Jumat Desa Sukasari Kaler Kecamatan Argapura Kabupaten Majalengka . J Kesehat. 2024;10(10):21–32.
46. Arlan AJ, Fitria N, Rafiyah I. Intensi Melaksanakan Self Study (Seven Jump : Step 6)

Dalam Small Group Discussion (SGD) pada Mahasiswa Angkatan 2011 Fakultas Ilmu Keperawatan Universitas Padjajaran. J Ilmu Keperawatan. 2014;2(1):95–108.

47. Yuniana E, Ningrum NP, Hidayatunnikmah N. Pengaruh Metode Small Group Discussion (SGD) Terhadap Pengetahuan Dan Sikap Remaja Tentang Seksual Pranikah (Studi di SMP dan SMK Nurul Huda Bragang Kecamatan Klampis). Semin Nas Has Ris Dan Pengabdi "Peran. 2023;2668–78.
48. Zainuddin, Yusuf NAR, Luadu N, Pilo W, K SSB. Peningkatan Pengetahuan Tentang Infeksi Menular Seksual Dengan Pendekatan Small Group Discussion (SGD) Pada Pelajar Di SMPN 1 Bulango Selatan. 2024;4(2):93–100.
49. Manalu HLL. Monograf Metode Promosi Kesehatan (Ceramah Dan Media Leaflet) Terhadap Pengetahuan Dan Sikap Ibu Tentang Gizi Balita Harauly Lady Lusiana Manalu, Sst, Mkm. Unpri Presss. 2022. i–67.
50. Suryani L. Efektivitas Metode Ceramah dan Diskusi Kelompok terhadap Kepatuhan Remaja Mengkonsumsi Tablet Tambah Darah. 2020;4(1):46–54.
51. Susanto DA, Setyaji A, Sukmaningrum R, Hawa F. Zero Bullying Dengan Peningkatan Kapasitas Guru Untuk Menciptakan Sekolah Ramah Anak. J Hum Educ. 2024;4(2):235–41.
52. Rosyadi I. Penerapan Self Management Conselling dengan Tipe Small Group Discussion dalam Membentuk Kecerdasan Emosional Peserta Didik Kelas XI IPS 1 di SMAN Umbulsari Kabupaten Jember. J Manaj dan Pendidik Dasar. 2024;4:592–618.
53. Saputri S, Tamrin MI, Alimir, Trisno B, Penmardianto. Penerapan Keterampilan Guru Membimbing Diskusi Kelompok Kecil Pada Mata Pelajaran Akidah Akhlak Di MtsM Sitalang Kabupaten Agam. 2024;18(2):66–80.
54. Afni ACN, Ekarini D. Studi Eksplorasi Pengalaman Mahasiswa Pembelajaran Seven Jump Di Program Husada Surakarta. KesMaDaSka. 2015;124–31.
55. Apsari S, Insanuddin I, Mulyanti S, Supriyanto I. Efektivitas Penyuluhan Tentang Kesehatan Gigi Dan Mulut Dengan Metode Ceramah Dan Diskusi Kelompok Terhadap Pengetahuan Responden (Studi Literatur). J Ter Gigi dan Mulut. 2021;1(1):9–15.
56. Bany ZU, Sunnati, Darman W. Perbandingan Efektifitas Penyuluhan Metode Ceramah dan Demonstrasi Terhadap Pengetahuan Kesehatan Gigi dan Mulut Siswa SD. Cakradonya Dent J. 2014;6(1):661–6.
57. Wahyuningsih IS. Eksplorasi Evaluasi Metode Problem Based Learning Melalui Pendekatan Seven Jump Method Pada Mahasiswa Keperawatan. 2018;3(2).
58. Prasandha D, Utomo APY. Evaluasi Keterampilan Dasar Mengajar Mahasiswa dalam Program Kampus Mengajar Angkatan 1 Tahun 2021. J Sastra Indones. 2022;11(1):48–55.
59. Mustikawati IS, Puspitaloka E, Abna IM. Peningkatan Pengetahuan Dan Sikap Mengenai Perilaku Hidup Bersih Dan Sehat Melalui Upaya Promosi Kesehatan Di Sekolah. J

Abdimas. 2021;7(3):228.

60. Arnetty, Ifitri I, Warman A, Anggraini EPA, Amiruddin. Original research. J SAGO. 2024;5.

61. Thaariq NA, Ningsih MP, Rahmawati L, Sandra Y. Pengaruh Media Edukasi terhadap Pengetahuan Siswa Sekolah Dasar tentang Pencegahan Covid-19. J Sehat Mandiri. 2022;17(2):80–6.

COMPARISON OF THE EFFECTIVENESS OF HEALTH PROMOTION WITH LECTURE METHOD AND SMALL GROUP DISCUSSION (SGD) METHOD ON BREAST SELF-EXAMINATION (BSE) KNOWLEDGE IN ADOLESCENTS

ORIGINALITY REPORT

19%
SIMILARITY INDEX

PRIMARY SOURCES

1	ejournal.almaata.ac.id Internet	202 words — 3%
2	ejournal.poltekkes-smg.ac.id Internet	92 words — 1%
3	talenta.usu.ac.id Internet	39 words — 1%
4	www.mdpi.com Internet	36 words — 1%
5	academic.oup.com Internet	29 words — < 1%
6	Magdalena Tompunuh, Sri Sujawaty, Odi Lodya Namangdjabar. "LECTURES AND YOUTH KNOWLEDGE ON REPRODUCTIVE HEALTH", Jambura Journal of Health Sciences and Research, 2022 Crossref	28 words — < 1%
7	ejournal.fkm.unsri.ac.id Internet	26 words — < 1%

8	Mayasari Putri Ardela, Rahma Kusuma Dewi, Siti Aminah, Meirna Eka Fitriasnani. "Effectiveness of Health Education Using Peer Education and Audio Visual Methods on the Level of Knowledge of Teenage Girls About HIV/AIDS", STRADA Jurnal Ilmiah Kesehatan, 2024 Crossref	24 words — < 1%
9	download.garuda.ristekdikti.go.id Internet	24 words — < 1%
10	ijsr.internationaljournallabs.com Internet	24 words — < 1%
11	ejournal.undiksha.ac.id Internet	22 words — < 1%
12	pkm.lpkd.or.id Internet	21 words — < 1%
13	Yuli Nursyam, Rusli, Zuhra, Rasmi. "IMPROVING STUDENTS' PRONUNCIATION OF MONOPHTHONG SOUND IN READING NARRATIVE TEXT BY USING CHORAL READING TECHNIQUE AT THE EIGHTH GRADE STUDENTS OF MTS ALKHAIRAT ALINDAU", Datokarama English Education Journal, 2021 Crossref	20 words — < 1%
14	ejournal.unisba.ac.id Internet	19 words — < 1%
15	Meydia Afrina, Jumiati Siska, Sudarwan Danim. "Developing Android-Based Chemistry Learning Media Using the Inquiry Model to Improve Students' Learning Outcomes and Critical Thinking Ability", Tadbir : Jurnal Studi Manajemen Pendidikan, 2023 Crossref	18 words — < 1%

16	Nova Gerungan. "HUBUNGAN TINGKAT PENGETAHUAN DENGAN PERILAKU PERIKSA PAYUDARA SENDIRI (SADARI) PADA MAHASISWI FAKULTAS KEPERAWATAN UNKLAB", Jurnal Skolastik Keperawatan, 2019 Crossref	18 words — < 1%
17	mural.maynoothuniversity.ie Internet	18 words — < 1%
18	vbn.aau.dk Internet	18 words — < 1%
19	Ayu Lestari, Dewi Rokhanawati. "Health education affects knowledge in the management of dysmenorrhea in adolescent girls", International Journal of Health Science and Technology, 2024 Crossref	17 words — < 1%
20	journal.fk.unpad.ac.id Internet	17 words — < 1%
21	journals.umkt.ac.id Internet	17 words — < 1%
22	www.fortunejournals.com Internet	17 words — < 1%
23	Magdalena Tri Putri Apriyani, Margareta Rinjani. "The Effect Of Bse With Audiovisual Methods On Bse Skill For Teenage Girls", JKM (Jurnal Kebidanan Malahayati), 2021 Crossref	16 words — < 1%
24	jurnal.univrab.ac.id Internet	15 words — < 1%
25	jurnal.utu.ac.id Internet	15 words — < 1%

26	repo.poltekkesbandung.ac.id Internet	15 words — < 1%
27	www.scitechnol.com Internet	15 words — < 1%
28	Eduardo Bruera, Irene J. Higginson, Charles F. von Gunten, Tatsuya Morita. "Textbook of Palliative Medicine and Supportive Care", CRC Press, 2021 Publications	14 words — < 1%
29	Yuly Peristiowati, Hariyono, Arantrinita. "Socialization and Early Detection of Breast Cancer Using the Android Application “MamoApp”", Journal of Community Engagement in Health, 2024 Crossref	14 words — < 1%
30	Endah Sudarmilah. "Theoretical Educational Practices of Siraja Javanese Script Interactive Learning Media Based On 2D Application", Educational Administration: Theory and Practice, 2021 Crossref	13 words — < 1%
31	ejournal.umm.ac.id Internet	13 words — < 1%
32	journal.stitmadani.ac.id Internet	13 words — < 1%
33	turkjphysiotherrehabil.org Internet	13 words — < 1%
34	Harold O. Taylor. "A comparison of the effectiveness of a lecture method and a small-group discussion method of teaching high school biology", Science Education, 1959 Crossref	12 words — < 1%

35	Metty Nurherliyany, Ima Sukmawati, Indri Nurmalasari. "EFEKTIVITAS METODE PEER GROUP EDUCATION DENGAN METODE DEMONSTRASI TERHADAP KETERAMPILAN SADARI PADA SISWI SMKN 1 CIAMIS", Healthy Tadulako Journal (Jurnal Kesehatan Tadulako), 2023 Crossref	12 words — < 1%
36	ejurnalmalahayati.ac.id Internet	12 words — < 1%
37	jurnal.unbrah.ac.id Internet	12 words — < 1%
38	www.4-h.ext.vt.edu Internet	12 words — < 1%
39	Indri Nurwahidah, Diah Nugraheni. "ANALISIS KETERAMPILAN BERKOMUNIKASI MAHASISWA CALON GURU IPA DALAM MELAKUKAN MICROTEACHING", EduTeach : Jurnal Edukasi dan Teknologi Pembelajaran, 2024 Crossref	11 words — < 1%
40	Sri Mulyanti, Isa Insanuddin, Salsabila Apsari, Irwan Supriyanto. "EFEKTIVITAS PENYULUHAN TENTANG KESEHATAN GIGI DAN MULUT DENGAN METODE CERAMAH DAN DISKUSI KELOMPOK TERHADAP PENGETAHUAN RESPONDEN (STUDI LITERATUR)", Jurnal Terapi Gigi dan Mulut, 2021 Crossref	11 words — < 1%
41	etheses.uinmataram.ac.id Internet	11 words — < 1%
42	journalmpci.com Internet	11 words — < 1%
43	Horton, Jacqueline A. "Teaching breast health to adolescent females in high school: Comparing	10 words — < 1%

interactive teaching with traditional didactic methods", Proquest, 20111109
ProQuest

44 Kunz, Amy Louise. "A Study of the Impact of Intercultural Competency Training on Education Support Professionals", Western Illinois University, 2024 — 10 words — < 1%
ProQuest

45 Sukmawati Sukmawati, Lala Yuliani, Furkon Nurhakim, Lilis Mamuroh, Restuning Widiasih. "THE RELATIONSHIP OF PEER SUPPORT WITH BREAST SELF EXAMINATION BEHAVIOR IN ADOLESCENT WOMEN", Jurnal Aisyah : Jurnal Ilmu Kesehatan, 2024 — 10 words — < 1%
Crossref

46 ejournal.urindo.ac.id — 10 words — < 1%
Internet

47 www.frontiersin.org — 10 words — < 1%
Internet

48 Lecture Notes in Computer Science, 2009. — 9 words — < 1%
Crossref

49 Winda Ayu Juwita Karni, Dewi Rostianingsih, Lenny Irmawaty Sirait. "CORRELATION BETWEEN FEMALE JUNIOR HIGH SCHOOL STUDENTS KNOWLEDGE AND BREAST SELF EXAMINATION BEHAVIOR", Indonesian Midwifery and Health Sciences Journal, 2024 — 9 words — < 1%
Crossref

50 Yuliani Lestari, Pradiva Dwi Lestari, H. Hazairin Efendi. "Factors Influencing Breast Cancer Early Detection Behavior Using Breast Self–Examination", Jurnal Kebidanan Malahayati, 2022 — 9 words — < 1%
Crossref

51 journals.plos.org

Internet

9 words — < 1%

52 nwmedj.org
Internet

9 words — < 1%

53 www.atlantis-press.com
Internet

9 words — < 1%

54 Aygül Kissal, Bahtısen Kartal. "Effects of Health Belief Model-Based Education on Health Beliefs and Breast Self-Examination in Nursing Students", Asia-Pacific Journal of Oncology Nursing, 2019
Crossref

8 words — < 1%

55 Fadhli Alfaini, Rhandyka Rafli, Meta Zulyati Oktara. "Factors Causing Diagnostic Delay and Treatment Delay Patient Breast Cancer in Universitas Andalas Hospital", Indonesian Journal of Cancer, 2024
Crossref

8 words — < 1%

56 Feny Dwi Aprilia, Taufan Arif, Nurul Hidayah, Tri Nataliswati. "Improving School-Age Children's Knowledge on Coughing and Sneezing Ethics through Linear Multimedia", Jurnal Ners dan Kebidanan (Journal of Ners and Midwifery), 2023
Crossref

8 words — < 1%

57 Ihda Dian Kusuma, Laksmitha Janasti, Riana Trinovita Sari, Britania Laila Nanda, Hikmawan Wahyu Sulistomo, Nurdiana Nurdiana. "The Effect of Sub-Acute Inhalation Exposure to Polyethylene Micro-Nano Plastics on the Histopathological Features of the Mammary Glands in Female Wistar White Rats (Rattus Norvegicus)", JURNAL INFO KESEHATAN, 2024
Crossref

8 words — < 1%

58	L P Sari, T D Purwita, I Wilujeng, Suyono. "Application of TTW (Think-Talk-Write) learning model using pictorial riddle worksheet to improve students's conceptual undertstanding abilities", Journal of Physics: Conference Series, 2020 Crossref	8 words — < 1%
59	Pardak, Piotr. "Ocena znaczenia greliny, obestatyny i leptyny w patogenezie choroby refluksowej przełyku w przebiegu obturacyjnego bezdechu sennego", University of Rzeszów (Poland) ProQuest	8 words — < 1%
60	ejurnal.poltekkesjakarta3.ac.id Internet	8 words — < 1%
61	garuda.kemdikbud.go.id Internet	8 words — < 1%
62	journal.um-surabaya.ac.id Internet	8 words — < 1%
63	scholar.archive.org Internet	8 words — < 1%
64	www.bezmialemscience.org Internet	8 words — < 1%
65	www.indonesianjournalofcancer.or.id Internet	8 words — < 1%
66	Albano, Mechel. "A Study of the Impact of Small-Group and Whole-Group Discussion on the Critical Thinking Dispositions of Community College English Composition II Students.", Southeastern University, 2018 ProQuest	6 words — < 1%

67 Jos H.C. Moust, Peter A.J. Bouhuijs, Henk G. Schmidt. "Introduction to Problem-based Learning - A guide for students", Routledge, 2019
Publications

6 words — < 1%

EXCLUDE QUOTES	OFF	EXCLUDE SOURCES	OFF
EXCLUDE BIBLIOGRAPHY	ON	EXCLUDE MATCHES	OFF