

The Rapport of Health Education Through Brainstorming Methods on Students' Knowledge and Attitudes About Sexuality Issues at the State Junior High School Darussalam District Banda Aceh

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Abstract

Sexual conduct is an activity motivated by sexual desire. Teenagers' attitudes will be influenced by their lack of understanding about premarital sex. Brainstorming approaches can also be used to address problems based on the ideas presented by pupils. The purpose of this study was to determine students' knowledge and attitudes toward sexuality issues before and after giving health education using the brainstorming approach at the State Junior High School 8 Darussalam district Banda Aceh. This investigation was a quasi-experiment. Data was collected from March 7 to April 6, 2023. This study used a sample of 15 brainstorming groups from State Junior High School. Data was collected via primary sources. The Wilcoxon test was employed in the analysis, which included univariate and bivariate approaches. The findings revealed variations in knowledge (p-value 0.001) and attitudes (p-value 0.001) among the brainstorming groups. The researchers determined that brainstorming had a considerable impact on pupils' knowledge and attitudes.

Keywords: Attitude, Brainstorming, Knowledge, Teenager.

1. Introduction

Sexual acts are caused by sexual thoughts, performed by the opposite sex or the same sex. Sexuality behavior in adolescents begins during dating such as touching, holding hands, kissing, sexual imagination, masturbation, petting and oral sex. These actions are contrary to religious norms which will have a negative impact on the future of adolescents (Purnama et al 2020). World Health Organization (WHO) in 2020, reported that approximately 10 million out-of-wedlock pregnancies occur each year among adolescent girls aged 15-19 years in developing countries, leading to the deaths of girls aged 15-19 years in the world. About 5.6 million abortions occur annually among adolescents aged 15-19 years, 3.9 million of which are unsafe, resulting in maternal mortality, morbidity, and long-term health problems (Andriani & Suhrawardi 2022).

Approximately 4.5% of men and 0.7% of women in Indonesia, aged 15-19 years, reported having tried premarital relationships. Among 15-19-year-olds, the comparative age of first date is 15-17 years old. 33.3% of adolescent females and 34.5% of adolescent males aged 15-19 started dating under the age of 15 (Andriani & Suhrawardi 2022). In Indonesia, teenagers go on their first date at the age of 12. 92% hand-holding, 82% kissing, 63% touching. These



actions can lead teenagers to acts of sexuality that can lead to unwanted pregnancies (Berliana et al 2021).

According to BPS data in 2020, the total population in Aceh is 5,274,900 people. The age group of 15–19-year-old adolescent girls in Banda Aceh is 8,871. Syiah Kuala is the largest area in Banda Aceh City 1,424 with a population of 32,138. The number of girls attending junior high school is 442. The marriage rate of 15 years old and above in Syiah Kuala is 22667. Subscription to women's human rights complaints in the city of Banda Aceh 299911 cases in 2020 (P2TP2A data) (Mirani et al 2022).

Health education for adolescents about sexual and reproductive health is a very important thing that includes health promotion actions in order to create adolescent health and development. Rn et al (2022) stated that health education is a form of activity to provide information about health to individuals and communities. After receiving health education, individuals and communities are expected to obtain information about good health. Good knowledge will form an attitude that can be observed as an example by others (Yugistiyowati, Anafrin ; Sugistiyowati, 2021).

Learning media is a tool used in the learning process, which is given when providing knowledge from educators to students (Kelrey & Kusbaryanto, 2021). The brainstorming method makes problem solving based on ideas submitted by students, thus creating an exchange of opinions that can increase knowledge. Students do not feel taught and given an explanation at the end of the activity so that students can provide opinions, ideas, knowledge and experience to solve a problem that has been given. The brainstorming approach teaches students to be autonomous, open, able to express their thoughts and present themselves in problem solving, and to respect the perspectives of others. This brainstorming approach utilizes power point material to offer an explanation at the conclusion of the exercise (Nazirah et al., 2021).

State Junior High School 8 is one of the junior high schools in Syiah Kuala sub-district that received adolescent reproductive health education from the community health center (BPS, 2020). With a total number of 329 students and 298 female students. Health education will be provided to ninth grade students totaling 111 boys and 100 girls. From the results of interviews conducted by researchers on 10 students / I said they had studied reproductive health and already had an attraction to the opposite sex, 6 of them said they had dated. Seeing the magnitude of the influence of health education on sexuality problems in adolescents, it is necessary to prove the relationship between health education through the brainstorming method on the knowledge of female students about sexuality problems in Darussalam District Banda Aceh Junior High School. The purpose of this study was to determine students' knowledge and attitudes toward sexuality issues before and after giving health education using the brainstorming approach at the State Junior High School 8 Darussalam district Banda Aceh.

2. Methods

This research is a quasi-experiment, using data collected from March 7 to April 6, 2023. The sample size for this study was 15 junior high school students. Primary data was collected and analyzed using the Wilcoxon test, as well as univariate and bivariate analytic approaches.

3. Results and Discussion

3.1. Research Results

Table. 1 Demographic Data

Categories	Brainstorming	
	Frequency (f)	Percentage (%)
1. Age		
Teenagers (15 years old)	15	100
2. Gender		
Male	8	53,3
Female	7	46,7

Source: Primary Data, 2023

Based on table 1, it can be seen that the frequency distribution of the age of respondents is entirely 15 years old (100%), male in the brainstorming group, namely 8 respondents (53.3%) and female in the brainstorming group, namely 7 respondents (46.7%).

Table. 2 Univariate Analysis

	N	Mean	Std. Deviation	Minimum
Knowledge				
Pre-Brainstorming	15	16,8	5,768	0
Post Brainstorming	15	30,3	1,234	27
Attitude				
Pre-Brainstorming	15	51,1	16,16	20
Post Brainstorming	15	82,9	9,445	62

Source: Primary Data, 2023

The descriptive statistical analysis above shows the average value of knowledge before being given the brainstorming intervention is 16.8, while the average knowledge after being given the intervention is 30.3. This shows there is a difference or increase, as well as the standard deviation which shows a smaller value, namely before 5.768 and after the intervention is 1.234.

The average value of knowledge before being given the brainstorming intervention was 51.1, while the average attitude after being given the intervention was 82.9. This shows there is a difference or increase, as well as the standard deviation which shows a smaller value, namely before 16.16 and after being given the intervention is 9.445.

3.1.1. Bivariate Analysis

Table 3. The Relationship between Health Education Through Brainstorming Methods on Knowledge and Attitudes

Intervention	P-Value
Pre-Test-Post-Test Knowledge of Brainstorming	0,001
Pre-Test-Post-Test Attitude of Brainstorming	0,001

Source: Primary Data, 2023

Table 3 shows that there are changes in knowledge and attitudes before and after the brainstorming intervention with a p value of 0.001.

3.2. Discussion

3.2.1. Effectiveness of Brainstorming on Knowledge and Attitude

Based on the findings of the preceding study, there are changes in knowledge and attitudes before and after the intervention of the brainstorming technique, with a p-value of 0.001. The brainstorming approach is a socratic health education method that operates on a two-way traffic model. This technique involves both facilitators and participants being equally involved, allowing people to be both active and creative. The brainstorming method is intended to provide opportunities for participants to demonstrate independence and self-direction, openness and integrity in selecting the best alternative actions, the ability to express opinions and self-actualize in problem solving, and the ability to respect the opinions of others. This brainstorming approach allows individuals to freely express their thoughts and solve problems while also respecting the viewpoints of others. This strategy seeks to collect thoughts or views to identify and pick various statements as responses to learning-related questions (Sihite et al., 2018).

The brainstorming approach has shown to be effective as a tool for gathering information on knowledge and attitudes toward achieving goals. This strategy allows for more in-depth analysis of respondents' information. A facilitator may help guide the application of the brainstorming approach and ensure that the conversation session runs well. The facilitator might serve as a resource person for conversation participants. A facilitator must be able to communicate effectively, listen to each individual of the conversation, summarize their perspectives, seek further information, and create a familiar and comfortable environment. The facilitator must respect the attitudes, ideas, and sentiments of each discussion member (Ratnaningsih, 2018).

The findings of this study are consistent with those of Ardan et al, who investigated the influence of brainstorming methods on the knowledge and attitudes of loading and unloading personnel concerning HIV and AIDS at Gorontalo port. The findings indicated an increase in knowledge (28.50 to 43.05) and attitudes (30.70 to 43.80). The Wilcoxon Test findings revealed changes in TKBM knowledge and attitude toward HIV and AIDS before and after the brainstorming session ($p=0.000$ and $p=0.000$, respectively). The brainstorming approach is an alternative for increasing knowledge and attitudes as a primary preventative effort, hence it is advised as a programme (Ardan et al., 2019).

Similarly, the results of Islamiah's research with the title of differences in knowledge and attitudes of students about sexually transmitted infections (STIs) using the lecture method and brainstorming method in high school. This study technique employs a true experimental approach, with a post-test only control group design. This study design has three groups: two experimental groups and one control group. The sample was collected using the Isaac and Michael Method, yielding 89 samples. This research instrument employs a questionnaire, and data is analyzed using the one-way Anova test. The one-way anova test yields a probability value of 0.000, indicating that the hypothesis is rejected (p -value <0.05) (Islamiah et al., 2019).

The researcher's assumption based on the results of this study is that brainstorming is the right method to increase their opinions related to adolescent reproductive health issues, in this case sexuality issues, collect them in their minds, analyze the opinions of each participant and conclude the results through treatment. Changes in treatment are certainly based on good knowledge which in the next stage will have a positive impact on the participants' knowledge. This is thought to be the basis of the brainstorming method effectively changing the knowledge and attitudes of participants in a positive direction.

4. Conclusion

Based on the results of research on the relationship between brainstorming methods on knowledge and attitudes of students on sexuality issues at SMP Negeri 8 Banda Aceh City conducted on March 7 to April 6, 2023, it can be concluded that there is an influence of brainstorming methods on the knowledge of students at SMP Darussalam District with a p-value of 0.001. In addition, the brainstorming method also has an influence on the attitude of students at Darussalam District Junior High School with a p-value of 0.001.

It is expected for adolescents to continue to increase information related to reproductive health, especially matters related to sexuality, in order to avoid problems that can be detrimental physically and mentally. For the research site, it is recommended to cooperate with the local health center in providing counseling related to sexuality issues in adolescents, considering that there are still many families who consider it taboo to discuss this topic with their children. Future researchers are likely to perform further study relating to adolescents, especially regarding sexuality, both in terms of diseases and other reproductive health problems, with different variables, larger samples, or more in-depth research approaches such as qualitative methods.

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