

THE EFFECT OF EDUCATION USING ANIMATION VIDEOS AND LEAFLETS ON KNOWLEDGE, ATTITUDES, PERSONAL ACTIONS HYGIENE DURING MENSTRUATION

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ABSTRAK DAMPAK EDUKASI DENGAN MENGGUNAKAN VIDEO ANIMASI DAN LEAFLETS TERHADAP PENGETAHUAN, SIKAP, TINDAKAN PRIBADI KEBERSIHAN SELAMA MENSTRUASI

Latar Belakang: Kebersihan diri merupakan suatu upaya yang dilakukan untuk menjaga kondisi fisik dan mental seseorang melalui pemeliharaan kesehatan dan kebersihan diri masing-masing orang. Manfaat menjaga kebersihan diri saat menstruasi adalah terhindar dari infeksi pada sistem reproduksi.

Tujuan: untuk mengetahui ada tidaknya pengaruh edukasi kesehatan reproduksi menggunakan media video animasi dan leaflet terhadap pengetahuan, sikap dan tindakan kebersihan diri saat menstruasi pada siswi kelas VII Pondok Pesantren MQ Al-Islami. Metode: Penelitian ini menggunakan metode quasi eksperimen dengan rancangan two group pretest-posttest design. Populasi penelitian adalah seluruh siswi kelas VII Pondok Pesantren MQ Al-Islami yang berjumlah 53 orang, dengan metode pemilihan sampel menggunakan teknik total sampling. Sampel dibagi menjadi dua kelompok yaitu 26 siswi yang mendapatkan edukasi melalui media video animasi dan 27 siswi yang mendapatkan edukasi melalui media leaflet. Hasil: Hasil penelitian menunjukkan adanya pengaruh edukasi melalui media video animasi dan leaflet terhadap pengetahuan, sikap dan tindakan. Hal ini dibuktikan dengan hasil uji Wilcoxon yang menunjukkan nilai p sebesar 0,013 untuk variabel pengetahuan, 0,025 untuk variabel sikap, dan 0,005 untuk variabel tindakan. Kesimpulan: Ketiga variabel tersebut memiliki nilai p kurang dari 0,05 yang artinya ada pengaruh edukasi menggunakan media video animasi dan media leaflet terhadap pengetahuan, sikap dan tindakan hygiene personal saat menstruasi pada siswi kelas 7 Pondok Pesantren MQ Al-Islami. Saran: Dapat menyebarkan leaflet dan video animasi yang telah diberikan peneliti kepada siswi lain mengenai hygiene personal saat menstruasi.

Kata Kunci: Hygiene Personal, Pendidikan Kesehatan, Menstruasi

ABSTRACT

Background: Personal hygiene is an effort carried out to maintain a person's physical and mental condition through health care and cleanliness of each person. The benefits of maintaining personal hygiene during menstruation are to avoid infections in the reproductive system.

Objective: to find out whether there is any influence or not education reproductive health using animated video media and leaflet towards knowledge, attitudes and actions personal hygiene during menstruation in class VII female students at the MQ Al-Islami Islamic boarding school.

Method: This study used a quasi-experimental method with a two-group pretest-posttest design. The study population included all 53 female students of class VII at the MQ Al-Islami Islamic boarding school, with the sample selection method using the total sampling technique. The sample was divided into two groups, namely 26 female students who received education through animated video media and 27 female students who received education through leaflet media.

Results: The results of the study indicate the influence of education through animated video media and leaflets on knowledge, attitudes and actions. This is evidenced by the results of the Wilcoxon test which shows a p-value of 0.013 for the knowledge variable, 0.025 for the attitude variable, and 0.005 for the action variable.

Conclusion: The three variables have a p-value of less than 0.05, which means that there is an influence of education using animated video media and leaflet media on knowledge, attitudes and actions of personal hygiene during menstruation in 7th grade female students at the MQ Al-Islami Islamic Boarding School.

Suggestion: Can disseminate leaflets and animated videos that have been given by researchers to other female students regarding personal hygiene during menstruation.

Keywords : Personal Hygiene, Health Education, Menstruation

INTRODUCTION

Teenage girls who experience menstruation must have good hygiene behavior to maintain cleanliness and health both physically and mentally. Teenage girls with low personal hygiene behavior consider cleanliness to be an unimportant problem. If left unchecked, diseases related to genitalia will occur ((Yumaeroh & Susanti, 2019). Improper personal hygiene behaviors include, rarely changing sanitary napkins during menstruation, using inappropriate sanitary napkin materials, frequently using antiseptics, not changing underwear less than twice a day, not using clean water to wash the genitals and washing the genitals in the wrong way.(Hanum et al et al., 2021)

Based on the theory(Situmeang, 2021)states that knowledge is a mental condition that allows someone to understand something, such as forming a view of an object by summarizing existing facts. Along with the development of the times, knowledge grows from human curiosity. Meanwhile, knowledge is also considered a psychological foundation that influences individual thought patterns. Someone who has knowledge will have and provide action in the form of behavior or actions. helping female students to better understand the importance of maintaining body hygiene during menstruation.

Attitude is one of the fundamental concepts in social psychology that discusses aspects of attitude, both at the individual and group levels. Various studies have been conducted to formulate the definition of attitude, the process of its formation, and the dynamics of its change. In addition, many studies also explore the relationship between attitudes and their impact on character formation, patterns of interaction between groups, and how decisions taken are influenced by environmental factors and changes that occur.(Notoatmodjo, 2018).

Attitudes are not always directly manifested in the form of real behavior (overt behavior). To realize an attitude in the form of action, supporting factors or enabling conditions are needed, such as the availability of facilities.(Notoatmodjo, 2018). After someone understands a stimulus or health object and makes an assessment of it, the next step that is expected is to apply or practice what has been known or believed to be something of positive value. This process is called health action (practice).

Hygiene is a scientific discipline that discusses health and efforts to maintain it. While personal hygiene is an activity or act of cleanliness of all parts of the body that plays a role in maintaining the cleanliness and health of individuals, including activities such as bathing, using the toilet,

general body hygiene, dressing up, and caring for skin, hair, nails, teeth, oral cavity, nose, eyes, ears and genital area.(Widyawati, 2017)

Personal hygiene is an effort that is implemented to maintain a person's physical and mental well-being through health care and hygiene of each person. Personal hygiene during menstruation can be done with various actions such as maintaining the health of reproductive organs and efforts to maintain the cleanliness of reproductive organs during menstruation.(Yulina Dwi Hastuty, 2021).

Most teenage girls who have experienced menstruation do not care for their genital area. This is due to limited knowledge about personal hygiene during menstruation, so they do not maintain cleanliness during that period. One habit that is less noticed is rarely changing pads and underwear.(Zubaidah, 2021).

As much as 1/5 or 20% of the world's total population consists of adolescent girls. Indonesia is ranked fifth as the country with the largest population in the world. In 2020, the population of Indonesia reached 270.20 million people, with 132.7 million male people and 131.5 million female people, the number of female population aged 0-17 years was 2.77%. According to WHO in 2019 around 75% of adolescent girls did not practice menstrual hygiene properly, so they were prone to reproductive tract infections. In Indonesia, of the total 69.4 million adolescents recorded in Indonesia, 63 million people had poor menstrual personal hygiene habits, the cause was poor personal hygiene during menstruation, lack of information about reproductive health, still considered a sensitive matter, so they have to wait until the time is right and understand independently, the low level of understanding of reproductive health can cause adolescent girls to be less hygienic during menstruation. Data from the 2022 West Java health profile states that there are a lot of cases of adolescents, reaching 8.4%, with cases due to fungus at 4.3%, cases due to UTI at 2.1% and others at 2%.(Ministry of Health of the Republic of Indonesia, 2022). The cause of low knowledge about personal hygiene is due to the lack of information obtained by teenagers.(Auliani et al, 2021)

People in Indonesia still believe in myths during menstruation such as not being allowed to wash your hair during menstruation, not being allowed to cut your nails, not being allowed to cut your hair and so on. The lack of public knowledge makes them have a mindset that has an impact on

themselves because of the lack of cleanliness that can cause infections, which then the rumor develops into a myth.(D., Susanti & Lutfiyati, 2022).

Research conducted by Susanti in 2020 in Yogyakarta revealed that out of 62 respondents, 62.9% had a high level of knowledge, while 61.8% showed positive behavior towards personal hygiene. This shows that the higher the level of knowledge, the better the behavior of maintaining personal hygiene during menstruation.(D. & L.A. Susanti, 2020).

Another study conducted by Herlinadiyaningsih, 2022 stated that the results of the study in the video group had an average pre-test knowledge of 68.75 and a post-test of 88.59 with a p value of 0.000. The average pre-test attitude was 51.19 and a post-test of 66.97. The average pre-test attitude was 52.06 and a post-test of 64.94 with a p value of 0.000. Video media and leaflets will also contribute to increasing knowledge and attitudes about menstrual hygiene. The results of statistical tests show that health education using video media is more effective(Herlinadiyaningsih, 2022).

Research findings conducted by Ria Fazelita Br Gultom in 2023 stated that health education provided through the use of audio-visual animation had a significant effect on the knowledge, attitudes and behavior of adolescent girls in maintaining personal hygiene during menstruation.(Ria Fazelita Br Gultom, 2023).

This study aims to determine whether there is an influence of reproductive health education using animated video media and leaflets on knowledge, attitudes and actions of personal hygiene during menstruation in 7th grade female students at the MQ Al-Islami Islamic Boarding School.

The benefits obtained from this study are by providing health education to female students using leaflet media and animated video media so that female students understand the importance of maintaining reproductive health during menstruation by doing good and proper personal hygiene. So that it can increase knowledge and knowledge in addition to reducing morbidity in reproductive health cases.

RESEARCH METHODS

This type of research applies an analytical quantitative approach using a quasi-experimental design with a two-group pretest-posttest model. Respondents were divided into two groups, namely the control group providing education using animated video media and the intervention group

providing education through leaflet media. This research was conducted at the MQ Al-Islami Islamic boarding school in October 2024.

The population in this study were all female students in grade VII who attended the MQ Al-Islami Islamic boarding school, totaling 53 female students. The sampling technique applied in this study was saturated sampling, which was divided into 2 classes, including the class that was given learning through animated video media. There were 26 people in the experimental class and 27 people in the class given leaflet media were in the control class.

Data collection was carried out using instruments or measuring tools of animated video media, leaflet media and questionnaires. In animated video media and leaflets before being used, the validity test was carried out by involving expert opinions by material experts and media experts who are competent in their fields, in this case the material experts used to assess the service of the item items were lecturers in charge of midwifery courses and media experts used to validate animated videos and leaflets were IT experts. Furthermore, on the questionnaire sheet in data collection, there was a list of structured questions in the form of closed questions based on a Likert scale with tiered answer options, namely (SL) always with point 5, (SR) often with point 4, (KD) sometimes with point 3, (PR) ever with point 2 and (TP) never with point 1.

The instruments in this study were tested through validity testing carried out using the product moment correlation technique, while the reliability test used the Cronbach alpha method. The results of the validity test showed that each question item had a Pearson correlation value exceeding 0.361, indicating that the item was valid and met the requirements for further reliability testing. Meanwhile, the results of the reliability test showed a Cronbach's alpha value exceeding 0.70, indicating that the instrument had a good level of reliability, meaning that the question items were reliable.

The data processing process is carried out through the following steps, namely editing, coding, tabulating, data entry, processing and cleaning data entry, at the data analysis stage, processing is carried out on the data that has been entered in order to obtain information that can provide answers to research questions and test hypotheses in this study, data analysis is carried out using SPSS which includes univariate analysis to analyze the relationship between dependent and independent variables. Statistical analysis tests used include the Wilcoxon test to compare two different repeated

groups and the Mann-Whitney test to test the differences between the two groups.

RESEARCH RESULT

Based on table 1, the frequency distribution of age, menstrual experience and information sources shows that most of these respondents are aged <13 years old in respondents who were given learning through animated video media as many as 20 people (76.9%) and those given leaflet media as many as 20 people (74.1%), based on menstrual experience most of the respondents have received and experienced menstruation in respondents who

were given education using animated video media as many as 19 people (73.1%) and those given leaflet media as many as 20 people (74.1%) then based on information sources, the majority of respondents obtained knowledge about menstruation from parents, teachers, health workers, print media or electronic media, namely in respondents who received education through animated video media as many as 13 people (50%) and those given leaflet media as many as 18 people (66.7%). It can be seen from the frequency distribution on leaflet media.

Table 1
Frequency Distribution of Age, Menstrual Experience and Information Sources

Variable	Animation Video		Leaflet Media	
	F	%	F	%
Age				
< 13 years	20	76.9	20	74.1
≥ 13 years	6	23.1	7	25.9
Menstrual Experience				
Already menstruating	19	73.1	20	74.1
Not menstruating yet	7	26.9	7	25.9
Resources				
Parent	13	50	18	66.7
Teacher	13	50	7	25.9
Health workers	0	0	2	7.4
Electronic media	0	0	0	0
Print media	0	0	0	0

Table 2
Frequency Distribution of Respondents' Knowledge Before and After Being Given Education with Animated Video Media and Leaflet Media

Knowledge	Pretest		posttest	
	F	%	F	%
Animation Video				
Good Knowledge	11	42.3	18	69.2
Lack of Knowledge	15	57.7	8	30.8
Leaflet Media				
Good Knowledge	11	40.7	24	88.9
Lack of Knowledge	16	59.3	3	11.1

This table shows the frequency distribution of knowledge about personal hygiene during menstruation in 7th grade female students at the MQ Al-Islami Islamic boarding school showed an increase after being given education using animated video media and leaflets. In the group that received education through animated videos, the number of

female students with good knowledge increased from 11 people (42.3%) in the pretest to 18 people (69.2%) in the posttest. Meanwhile, in the group that was given education through leaflets, the number of female students with good knowledge increased from 11 people (40.7%) in the pretest to 24 people (88.9%) in the posttest.

Table 3
Frequency Distribution of Respondents' Attitudes Before and After Being Given Education with Animated Video Media and Leaflet Media

Attitude	Pretest		posttest	
	F	%	F	%
Animation Video				
Positive Attitude	12	46.2	20	76.9
Negative Attitude	14	53.8	6	23.1
Leaflet Media				
Positive Attitude	10	37.0	20	74.1
Negative Attitude	17	63.0	7	25.9

This table shows the frequency distribution of personal hygiene attitudes during menstruation in female students of class VII at the MQ Al-Islami Islamic boarding school at the pretest and posttest stages who received education using animated video media and leaflets, most of which experienced an increase, namely for those who

received education through animated video media in the pretest who had a positive attitude of 12 people (46.2%) to 20 people (76.9%) and for those who were given leaflet media in the pretest who had a positive attitude of 10 people (37%) to 20 people (74.1%).

Table 4
Frequency Distribution of Respondents' Actions Before and After Being Given Education with Animated Video Media and Leaflet Media

Action	Pretest		Posttest	
	F	%	F	%
Animation Video				
Positive Action	16	61.5	24	92.3
Negative Actions	10	38.5	2	7.7
Leaflet Media				
Positive Action	7	25.9	18	66.7
Negative Actions	20	74.1	9	33.3

This table shows the frequency distribution of personal hygiene actions during menstruation in female students in grade VII at the MQ Al-Islami Islamic boarding school at the pretest and posttest stages who received education using animated video media and leaflets, most of whom experienced progress, namely for female students who received education through animated video media at the pretest stage showed positive actions of 16 people (61.5%) to 24 people (92.3%) and for those given leaflet media at the pretest who had positive actions of 7 people (25.9%) to 18 people (66.7%).

This table 5 shows the analysis of the influence of education using animated video media and leaflets on knowledge of personal hygiene during menstruation in class VII female students at the MQ Al-Islami Islamic boarding school, respondents who were given education through animated video media obtained a P-value of 0.008 and respondents who were given education using leaflet media obtained a p-value of 0.013. Both obtained a p-value <0.05, which means that there is an influence of education using animated video media and leaflets on knowledge of personal hygiene during menstruation in class VII female students at the MQ Al-Islam Islamic boarding school.

Table 5
Analysis of the Influence of Education Using Animated Video Media and Leaflet Media on Personal Hygiene Knowledge During Menstruation in Class VII Female Students at the MQ Al-Islami Islamic Boarding School

Knowledge	N	Mean Rank	P-Value
Animation Video Media			
<i>Negative Ranks</i>	7	4.00	0.008
<i>Positive Ranks</i>	0	.00	
Ties	19		
Leaflet Media			
<i>Negative Ranks</i>	11	7.00	0.013
<i>Positive Ranks</i>	2	7.00	
Ties	14		

Table 6
Analysis of the Influence of Education Using Animated Video Media and Leaflet Media on Personal Hygiene Attitudes During Menstruation in Class VII Female Students at the MQ Al-Islami Islamic Boarding School

Attitude	N	Mean Rank	P-Value
Animation Video Media			
<i>Negative Ranks</i>	8	4.50	0.005
<i>Positive Ranks</i>	0	.00	
Ties	18		
Leaflet Media			
<i>Negative Ranks</i>	5	3.00	0.025
<i>Positive Ranks</i>	0	.00	
Ties	22		

This table shows the analysis of the influence of education using animated video media and leaflets on attitudes towards personal hygiene during menstruation in class VII female students at the MQ Al-Islami Islamic boarding school, respondents who received education through animated video media obtained a p-value of 0.005 and respondents who received education through

leaflet media obtained a p-value of 0.025. Both obtained a p-value <0.05 which means that there is an influence of education using animated video media and leaflets on attitudes towards personal hygiene during menstruation in class VII female students at the MQ Al-Islami Islamic boarding school.

Table 7
Analysis of the Influence of Education Using Animated Video Media and Leaflet Media on Personal Hygiene Actions During Menstruation in Class VII Female Students at the MQ Al-Islami Islamic Boarding School

Action	N	Mean Rank	P-Value
Animation Video Media			
<i>Negative Ranks</i>	1	5.50	0.011
<i>Positive Ranks</i>	9	5.00	
Ties	16		
Leaflet Media			
<i>Negative Ranks</i>	13	8.00	0.005
<i>Positive Ranks</i>	2	8.00	
Ties	12		

This table shows the analysis of the influence of education using animated video media and leaflets on personal hygiene actions during menstruation in class VII female students at the MQ Al-Islami Islamic boarding school, respondents who received education through animated video media obtained a p-value of 0.011 and respondents who

were given education using leaflet media obtained a p-value of 0.005. Both obtained a p-value <0.05, which means that there is an influence of education through animated video media and education through leaflet media on personal hygiene actions during menstruation in class VII female students at the MQ Al-Islam Islamic boarding school.

Table 8
Differences in the Influence of Education Using Animated Video Media and Leaflet Media on Knowledge, Attitudes and Actions on Personal Hygiene during Menstruation in Female Students Class VII at the MQ Al-Islami Islamic Boarding School

Variables	Group	N	Mean Rank	P-Value
Knowledge	Animation Video Media	26	23.10	0.028
	Leaflet Media	27	30.76	
Attitude	Animation Video Media	26	21.50	0,000
	Leaflet Media	27	32.30	
Action	Animation Video Media	26	23.54	0.023
	Leaflet Media	27	30.33	

This table shows the difference in the influence of education using animated video media and leaflets on knowledge, attitudes and actions of personal hygiene during menstruation in class VII female students at the MQ Al-Islami Islamic Boarding School. The p-value for the knowledge variable is 0.028, the attitude variable obtains a p-value of 0.000 and the action variable obtains a p-

value of 0.023. The three variables obtain a p-value <0.05, which means that there is a difference in the influence of education through animated video media and leaflets between the experiment and control both for knowledge, attitudes and actions of personal hygiene during menstruation in class VII female students at the MQ Al-Islami Islamic Boarding School.

Table 9
Differences in the Effectiveness of Education Using Animated Video Media and Leaflet Media on Knowledge, Attitudes and Actions of Personal Hygiene during Menstruation in Class VII Female Students At the MQ Al-Islami Islamic Boarding School

Variables	Group	N	Mean	Std. Deviation
Knowledge	Animation Video Media	26	3.50	3,982
	Leaflet Media	27	4.48	3,142
Attitude	Animation Video Media	26	1.31	2,379
	Leaflet Media	27	7.74	3,218
Action	Animation Video Media	26	35.85	1,617
	Leaflet Media	27	32.30	10,841

This table shows the difference in the effectiveness of education using animated video media and leaflets on knowledge, attitudes and personal hygiene actions during menstruation in class VII female students at the MQ Al-Islami Islamic Boarding School. The mean value on the knowledge variable that received education through animated video media was 3.50 while the mean value on the knowledge variable that received education through leaflet media was 4.48, on the attitude variable the mean value that received education through animated video media was 1.31

while the mean value on the attitude variable that received education through leaflet media was 7.74 and on the action variable the mean value that received education through animated video media was 35.85 while the mean value on the action variable that was given education using leaflet media was 32.30. Therefore, it can be concluded that health education using is more effective in improving knowledge and attitudes, while education through animated video media is more effective in improving personal hygiene actions in class VII

female students at the MQ Al-Islami Islamic Boarding School.

DISCUSSION

Adolescence is the phase of the most rapid change in humans. Adolescence is divided into three, namely early adolescence, middle adolescence and late adolescence. Early adolescence occurs at the age of 11-13 years. Generally, early adolescence occurs in junior high school.(Murti & Murti, 2022). So the results of the characteristics of respondents based on age in this study are in line with the existing theory, namely that class 7 has an age range of <12 years, namely 19 people (73.1%) for those given education using animated video media and those given leaflet media with an age of <13 years as many as 20 people (74.1%). Age is the age calculated from birth until the time he will have his birthday. The older the age, the level of maturity and strength of a person will be more mature in thinking and working(Zulmiyetri et al., 2019).

Menstrual experience here shows female students who have experienced menstruation or menarche. Menarche is the first menstruation that usually occurs in the range of 10-16 years or in early adolescence in the middle of puberty before entering the reproductive period.(Fatmawati et al., 2022). The results of this study showed that most of the 7th grade female students at the MQ Al-Islami Islamic boarding school had experienced menstruation, namely 19 people (73.1%) of respondents who were given education using animated video media and 20 people (74.1%) of respondents who were given education using leaflet media. The results of the menstrual experience obtained in this study are in line with existing theories. Adolescents who experience menarche in early adolescence and have insufficient knowledge about menstruation can cause a lack of awareness of the importance of personal menstrual hygiene behavior. While adolescents who experience menarche at an older age and may have received knowledge and information about menstrual hygiene can cause good menstrual hygiene behavior. (Amalia et al., 2021).

The results of the analysis show that most of the 7th grade female students at the MQ Al-Islami Islamic boarding school have received information related to personal hygiene during menstruation, sources of information related to personal hygiene during menstruation, sources of information obtained were mostly obtained from parents, namely for respondents who were given animated video media as many as 13 people (50%) and those

given leaflet media as many as 21 people (77.8%). This is in line with Suryani's theory, 2019 which states that knowledge is something that someone believes in an object, so it can be concluded that trust is a fundamental thing in a person's knowledge.(Suryani, 2019).

The influence of education using animated video media and leaflets on knowledge, attitudes and actions of personal hygiene during menstruation in class VII female students at the MQ Al-Islami Islamic boarding school shows that there is an influence of education using animated video media and leaflet media on knowledge, attitudes and actions of personal hygiene during menstruation in class VII female students at the MQ Al-Islami Islamic boarding school.

The findings of this study are in line with a study conducted by Hartoyo & Susanto (2021), which states that health education can have a positive impact in influencing behavior in maintaining personal hygiene. The use of leaflet media in delivering health education also plays a supporting factor, because it helps researchers present information in an interesting, easy-to-understand, easy-to-remember, and fun way for teenagers.(Hartoyo & Susanto, 2021).

A study conducted by Anita (2023) revealed that based on the findings of the Mann-Whitney test on respondents' attitudes regarding hypertension, it showed that the mean (average) in the experimental group showed a higher number, namely 29.60. In the Z statistical test, the number was -2.035 and the p value = 0.042 so that the p value <0.05, therefore H_0 was rejected, from these findings, it can be stated that there is a difference in video media and leaflets on public attitudes about hypertension in the Tirawuta Health Center work area, East Kolaka Regency in 2023. And the mean rank of the attitude of the video media group is higher than the group given leaflet media, from this average difference it can be concluded that video media is more effective than using leaflet media (Anita et al., 2023)

According to research conducted by(Harahap et al., 2022)Health education plays a role as a means of conveying information to increase knowledge and encourage changes in individual habits for the better. The more information obtained, the broader a person's insight. (Suryani, 2019)also revealed that the level of knowledge of adolescents can change as a result of the information they receive. This information can be obtained directly or indirectly. Direct sources of information include friends, family, and health workers, while indirect sources can come from the mass media.(Suryani, 2019).

Video media is one of the health education media that has the advantage of combining audio and visual elements, making it more effective in attracting attention and conveying information in an interesting way. The use of animated video media in education allows the combination of various elements that can stimulate thinking, feelings, attention, creativity, and innovation, as well as provide direct experience to the audience. The learning process that involves more than one sense tends to be easier for someone to understand and remember (Sulistiani, 2022)

In line with the research conducted by Yuliana & Yulianti, 2023 the results of the Wilcoxon test showed a p-value of 0.000 which is smaller than 0.05. This indicates that the alternative hypothesis (H_a) is accepted, while the null hypothesis (H_0) is not accepted, thus, it can be concluded that health education has an effect on increasing knowledge about personal hygiene during menstruation in adolescent girls at SMPN, Simbuang District (Yuliana & Yulianti, 2023).

Research conducted by Entin Jubaedah (2019) shows that the use of animated video media contributes to increasing knowledge. In this study, the knowledge in question includes understanding before and after the intervention using animated video media. Based on the results of the questionnaire recapitulation before the intervention, the majority of respondents still do not have an understanding of personal hygiene during menstruation, including the purpose, impact of lack of personal hygiene, and how to choose safe sanitary napkins. This study shows that most respondents have a low level of understanding, which is caused by a lack of counseling or seminars. Individuals who have access to more information tend to have broader insights. The low level of knowledge of respondents regarding personal hygiene during menstruation is also related to the lack of early education from parents, so that many teenagers are less concerned about the importance of maintaining the cleanliness of the feminine area during menstruation. One of the main sources that plays a role in increasing knowledge is the mass media. Health information, including personal hygiene, comes from various channels, such as print media, electronic media, education in schools, and counseling programs. The results of the normality test above using the Shapiro-Wilk pretest leaflet method obtained a p-value or sig value of $0.121 > 0.05$ and a posttest leaflet of $0.054 > 0.05$, which means that the data is normally distributed and the pretest animated video obtained a p-value or sig of $0.063 > 0.05$ while the animated video was

$0.110 > 0.05$. (Jubaedah et al., 2019).

This finding is in line with the study conducted by Anita et al., 2023 where the Wilcoxon sign rank test statistical test showed a p-value of 0.000 which is smaller than 0.05. This indicates that the null hypothesis (H_0) is rejected, so it can be concluded that education using leaflet media has an effect on the attitudes of adolescent girls regarding genital hygiene during menstruation at SMP Negeri 2 Bengkulu City. (Anita et al., 2023).

Research conducted by Herlinadiyaningsih, 2022 shows that based on the analysis of Wilcoxon test data, there is a difference in the average attitude before and after being given counseling using leaflet media. Before the intervention, the average attitude of respondents was 52.06, while after the intervention it increased to 62.81, with an average difference of 10.75. These results indicate a significant change in attitude after being given the intervention. In addition, data analysis shows that the p-value for the group receiving education through leaflets is 0.000 (p-value < 0.05), so H_0 is rejected and H_a is accepted. Thus, it can be concluded that health counseling using leaflet media has an effect on improving attitudes in maintaining cleanliness during menstruation. (Herlinadiyaningsih, 2022).

Action is a person's response to a stimulus that has a certain frequency, duration, and purpose, whether done consciously or not. Attitudes can occur automatically manifested in an action (overt behavior), to realize an attitude into a real action, supporting factors or a condition that allows it are needed, including facilities. (Dewi, 2017).

Research conducted by Lisa Handayani, 2020 showed that the action variable experienced the most dominant change after being given an intervention using animated video media. Education through this media helps female students better understand how to maintain personal hygiene during menstruation, with a significance level of < 0.05 at SMPN 2 Toili. Based on these results, it can be concluded that there is an increase in understanding in terms of knowledge, attitudes and actions after being given education about the importance of personal hygiene during menstruation. Therefore, this study is expected to be a lesson that female students' awareness of personal hygiene during menstruation is very necessary, especially before being given intervention through animated videos. (Lisa et al., 2020).

Based on the researcher's assumption, reproductive health education through animated video media and leaflets has an effect on increasing knowledge about personal hygiene during

menstruation. This situation arises due to the need for broader information from various sources, especially through the provision of education with both media. With increased knowledge, it is expected that there will be a change in behavior in maintaining personal hygiene during menstruation, which can ultimately contribute to improving the health of individuals. In order to maintain a good level of knowledge, ongoing socialization or health education is needed in the school environment, especially in boarding schools, one of which is an Islamic boarding school, as well as how female students continue to learn, both through personal experience and from others, and change negative behavior before receiving education to be more positive after receiving education. Increased knowledge also plays a role in encouraging changes in behavior in maintaining personal hygiene during menstruation in a better direction so that it can prevent various diseases and contribute to improving the health of individuals.

The difference in the influence of education using animated video media and leaflets between the experimental and control classes, both in terms of knowledge, attitudes and actions of personal hygiene during menstruation in class VII female students at the MQ Al-Islami Islamic boarding school, shows that there is a difference in the influence of education using animated video media and leaflets between the experimental and control classes, both in terms of knowledge, attitudes and actions of personal hygiene during menstruation in class VII female students at the MQ Al-Islami Islamic boarding school.

The difference in the effectiveness of education using animated video media and leaflet media on knowledge, attitudes and actions of personal hygiene during menstruation in class VII female students at the MQ Al-Islami Islamic boarding school. Shows that for the knowledge and attitude variables, education using leaflet media is more effective, while for the action variable, education using animated video media is more effective. These results are in line with the theory put forward by Irma Nurmila, 2018 and the theory which states that by providing health education using leaflet media, it is easier for female students to gain knowledge of good and correct personal hygiene procedures so that female students change their behavior in personal hygiene care.(Dewi Puspitaningrum, 2023). In addition, these results are also consistent with research conducted by Lisa Handayani, 2020, which shows that the action variable experienced the most significant changes

after being given intervention through animated video media.(Lisa et al., 2020).

Differences in the effectiveness of using animated video media and leaflets between the experimental and control classes. This is in line with the theory put forward by Frathidina, 2017 which states that leaflets are printed sheets containing information about a particular topic that is aimed at targets with specific goals. Leaflets have several advantages, including being able to be stored for a long time, allowing readers to re-access information when needed, can be used as reference material, and have high credibility because they are published by authorized agencies. In addition, leaflets have a wide reach, can be reprinted if needed, and can be used as discussion material on various occasions(Frathidina, 2017).

Health education according to Irma Nurmala's theory in 2018 is an educational activity that aims to convey messages and build confidence, so that people not only understand and realize, but are also willing and able to apply it in following instructions that are related to health. The health education process using media is an alternative learning to meet the needs of children and teenagers. Thus, abilities, reasoning and skills can be optimized to improve adolescents' understanding of self-care, especially during menstruation. Health education aims to change unhealthy behaviors into healthy ones. This is also supported by the theory that states that the selection and use of media as an aid is an important component in the education process, with the aim of maximizing the use of as many senses as possible. A person gains knowledge through their five senses, where most of the information is received through sight (eyes) and hearing (ears), while the rest is obtained through the senses of touch, taste and smell.(Irma, 2021).

The theory put forward by Dewi Puspitaningrum, 2023 states that according to WHO (World Health Organization) that several countries found young women between the ages of 10 and 14 years have reproductive problems such as itching in the vulva. In adolescent girls must be able to care for their reproductive organs. Cleanliness of intimate areas, especially during menstruation, is often ignored by teenagers without paying attention to proper intimate hygiene. When wet, fungi and bacteria grow in the intimate area, causing itching and infection in the area. By providing health education using leaflet media, it is easier for female students to gain knowledge of good and correct personal hygiene procedures so that female students change their behavior in personal hygiene care(Dewi Puspitaningrum, 2022).

This is in line with the theory put forward by Fradhina, 2017 which states that leaflets are printed media in the form of sheets containing information about a particular topic and are aimed at targets with specific goals. Leaflets have several advantages, such as being able to be stored for a long time, allowing readers to review information if they forget, can be used as a reference, and have high credibility because they are published by authorized agencies. In addition, leaflets have a wide reach, can be reprinted if needed, and can be used as discussion material on various occasions (Frathidina, 2017).

Research conducted by Hartoyo, 2021 shows that health education has a significant influence. Based on Suseno's theory, 2021 revealed that animated video media is included in the audio-visual media category, namely media that involves the senses of hearing and sight. Audio-visual media can be used as an aid in listening learning, because it allows students to hear and see images at the same time, so that it can increase interest in learning. In addition, videos can be used in various topics, learning models, and cover the cognitive, affective, and psychomotor domains. In the cognitive domain, students can observe dramatic representations as part of the learning process, based on historical events in the past and actual records of current events, through leaflet media about personal hygiene of external genitalia during menstruation on the understanding and actions of adolescents (Hartoyo & Susanto, 2021). This study is also in line with a study conducted by Hatusupy, 2017 which showed that delivering information through leaflets has an effect on increasing students' knowledge about adolescent reproductive health. The comparison of the effectiveness of health education using video media and leaflets on increasing knowledge, attitudes and behavior of menstrual hygiene was analyzed using the Mann-Whitney test. The results of the test showed that the p-value for the difference in knowledge scores between the animated video media and leaflet groups was 0.103, while the p-value for the difference in attitude scores was 0.085. Based on these results, it can be concluded that there is no significant difference in increasing knowledge, attitudes and behavior between video media and leaflets (Hatusupy, 2017).

In accordance with the researcher's assumption, in improving knowledge and attitudes towards female students who attend Islamic boarding schools, it is more effective to provide counseling or education on reproductive health regarding personal hygiene during menstruation

using leaflet media, because the education is given in the Islamic boarding school environment which is not allowed to bring mobile phones and it is difficult to get access to play animated videos, so leaflet media is more effective in providing reproductive health education, leaflet media has easy-to-understand content, equipped with attractive colors and images so that it is easy for female students to remember and make it easier to carry out personal hygiene during menstruation and female students can read repeatedly so that it can improve the knowledge and attitudes of female students in carrying out personal hygiene during menstruation. Meanwhile, providing counseling or education using animated video media is more effective in improving menstrual hygiene actions for adolescent girls, because animated videos can present information visually in an interesting way, making it easier to understand and remember, animated video media tends to be more interactive and fun especially when carrying out personal hygiene actions during menstruation and animated videos allow the delivery of information about personal hygiene in a systematic and clear way, such as the correct actions in maintaining hygiene during menstruation.

This study still has limitations related to the variables used, because it only involves two types of media. It is better for further research to consider the use of several other media so that the results obtained are more comprehensive and the analysis is more in-depth. Each learning media has unique characteristics, with different levels of problem complexity, as well as its own advantages and disadvantages.

CONCLUSION

Based on the results of the analysis that have been presented, it can be concluded that this study shows that there is an increase in the influence of reproductive health education using animated video media and leaflets on knowledge, attitudes and actions of personal hygiene during menstruation in class VII female students at the MQ Al-Islami Islamic boarding school. There is a difference in the influence of reproductive health education using animated video media and leaflets between the experimental and control classes, both for knowledge, attitudes and actions of personal hygiene during menstruation in class VII female students at the MQ Al-Islami Islamic boarding school. There is a difference in the effectiveness of reproductive health education using animated video media and leaflets on knowledge, attitudes and actions of personal hygiene during menstruation in

class VII female students at the MQ Al-Islami Islamic boarding school.

SUGGESTION

For Islamic boarding schools, they can reproduce and disseminate leaflets and animated videos that have been given by researchers to other female students so that they can be used in providing education related to personal hygiene during menstruation. Female students are expected to reread the leaflets and replay the animated videos that have been given by researchers. For further researchers, so that education can run smoothly, researchers are expected to bring the tools needed to provide education because not all research sites provide them. For health workers, especially midwives, they can provide promotive efforts by providing health education in schools, especially Islamic boarding schools, or by disseminating the information through their respective social media.

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