## AUDIOVISUAL MEDIA AS ONE OF THE HEALTH EDUCATION MEDIA THAT CAN AFFECT ADOLESCENT PERSONAL BEHAVIORS IN THE MANAGEMENT OF LEUKORHEA

## Yanita Trisetiyaningsih<sup>1\*</sup> & Ida Nursanti<sup>1</sup>

<sup>1</sup>Universitas Jenderal Achmad Yani Yogyakarta, Indonesia Jl. Siliwangi, Ring Road Barat, Gamping, Sleman, Yogyakarta

#### Abstract

At puberty, young women will experience an increase in the hormone estrogen, allowing adolescents to experience vaginal discharge. Leucorrhoea can be caused due to wrong habits in doing personal hygiene. In Indonesia 2013 there were 237,641,326 cases of adolescents experienced vaginal discharge (75%) Based on statistical data in Indonesia 2008, of 43.3 million adolescents aged 15-24 years of unhealthy behavior which is one of the causes of leucorrhoea According to static data in the Special Region of Yogyakarta in 2009 the number of teenagers 2.9 million people aged 15-24 years 68% experience vaginal discharge. The objective studyd is knowing the effect of health education with audiovisual methods on knowledge, attitudes, and personal hygiene behavior in handling vaginal discharge. This research is conducted at SMP Negeri 1 Gamping for class XIII and IX. Data collection begins with conducting a pretest, providing health education with audiovisual methods, and posttest. The data obtained will be performed univariate analysis and bivariate analysis using the Wilcoxon Signed Rank Test. The average score of the level of knowledge in the pretest handling was 85.3 and the posttest was 86.7. The average score of the pretest attitude was 80.7 and the posttest was 80.8. The average score of the pretest behavior was 73.4 and the posttest was 76.3. Health education using audiovisual does not affect the level of knowledge and attitudes of adolescents in handling vaginal discharge, but does affect adolescent behavior.

Keywords: Adolescent; Vaginal Discharge

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\*) Corresponding author:

Email: ners\_yanita@yahoo.co.id

### 1. Introduction

Adolescence is a transitional period from childhood to adulthood which is a period of maturation of the human reproductive organs and is often called puberty. Adolescence is divided into three, namely early adolescence, middle adolescence, and late adolescence (Widyastuti. Y, Rahmawati. A, Purnamaningrum. Y, 2009). At this time, adolescents will experience various changes physical, hormonal, and psychological changes.

At this time young women who have experienced menarche and an increase in the hormone estrogen will occur, so that adolescents can experience vaginal discharge (Johar, Sri, & Nimatul, 2013). Leucorrhoea is the discharge from the vagina other than menstrual blood, whether it smells or not, and is accompanied by local itching (Kusmiran, 2012). Whitish is divided into two, namely normal vaginal discharge and abnormal vaginal discharge.

In Indonesia, in 2013 as many as 237,641,326 people experienced vaginal discharge as much as 75% (Anggraeni, Nurrahima, & Purnomo, 2015). Humid weather conditions in Indonesia can

cause vaginal discharge in women (Muhamad, Hadi, & Yani, 2019). Based on statistical data in Indonesia in 2008, 43.3 million adolescents aged 15-24 have unhealthy behavior which is one of the causes of vaginal discharge (Azizah N, 2015). According to static data in the Special Region of Yogyakarta in 2009, the number of teenagers, 2.9 million people aged 15-24 years, 68% of them experience wholeness (Setiani, Prabowo, & Paramita, 2015).

Leucorrhoea is caused due to bacterial infection, poor vaginal hygiene behavior such as washing the vagina with dirty water, improper internal examination, excessive use of vaginal rinses, unhygienic examination, and the presence of foreign objects in the vagina. Apart from infection, vaginal discharge is also caused by pants not absorbing sweat (Kusmiran, 2012).

Good personal hygiene behavior cannot be separated from the factors that affect a person's hygiene. Factors that affect personal hygiene include body image, social practices, economic status, physical condition, and knowledge (Hardono, et all, 2019). Knowledge of personal hygiene is very

important for a person, this is because the broader knowledge of personal hygiene can improve a person's health status (Tarwoto & Wartonah, 2010). According to research from 54 respondents, 48 respondents had less knowledge about personal hygiene during menstruation, 2 respondents had good knowledge, and 4 respondents had sufficient knowledge, this was due to the limited information obtained (Komariyah & Mukhoirotin, 2018). One of the sources of knowledge and information that can be obtained by adolescents is through health education (Yulfitria, 2017).

### 2. Method

This type of research is a quantitative study that uses quasi-experimental designs with a pretestposttest without a control group design. In this study, respondents were given health education using audiovisual media. This research was conducted at SMP Negeri 1 Gamping in May - December 2020. In this study, researchers determined a sample size of 72 students. The sampling technique in this study used purposive sampling technique with inclusion criteria, including female students who have experienced menstruation, are willing to become respondents, experience physiological vaginal discharge or not. Meanwhile, the exclusion criteria included students suddenly getting sick and not being present when collecting data. Data collection was carried out online using google form. The variables assessed using a questionnaire include the level of knowledge, attitudes, and personal hygiene behavior of adolescents in the effort to handle vaginal discharge. Bivariate analysis using the Wilcoxon Signed Rank Test with a significance level set in this study was p < 0.05.

## 3. Results and discussion Characteristics of Respondents

Based on table 1, it is found that the characteristics of respondents in the intervention group were mostly 14 years old as many as 19 people (52.8%), most of whom had parents with high school education as many as 26 people (72.2%), most experienced their first menstruation at the age of 11-12 years, the majority have had their gadget (97.2%), the majority have received information related to

An overview of the level of adolescent knowledge related to handling vaginal discharge before and after health education is shown in table 2.

Table 2. Description of Adolescent Knowledge Levels related to Leucorrhoea Management before and After Health Education

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Criteria	Pretest	Posttest
Good	9 (12,5%)	12 (16,7%)
Enough	53 (73,6%)	54 (75%)
Low	10 913,9%)	6 (8,3%)
Score		
Min-Max	64,3-100	50-100

vaginal discharge (80.6%), and the majority have received information via the internet (47.2%).

Table 1.	Characteristic	of Res	pondent

		Total		
No	Characteristic	N	%	
1	Age			
	13 years	5	13,9%	
	14 years	19	52,8%	
	15 years	12	33,3%	
2	Parent's			
	Education	3	8,3%	
	SD	4	11,1%	
	SMP	26	72,2%	
	SMA	3	8,3%	
	Perguruan			
	Tinggi			
3	Parent's			
	Work	11	30,6%	
	Entrepreneur	6	16,7%	
	Private	6	16,7%	
	employees	13	36,1%	
	Government			
	employees			
	Others			
4	Age of			
	Menarche	1	2,8%	
	9 years	4	11,1%	
	10 years	10	27,8%	
	11 years	10	27,8%	
	12 years	11	30,6%	
	13 years	0	0%	
	14 years			
5	Media			
	Informasi	1	2,8%	
	Friend	0	0%	
	Sibling	1	2,8%	
	Teacher	17	47,2%	
	Internet	5	13,9%	
	Health	12	33,3%	
	workers			
	Others			

## Description of Adolescent Knowledge Level related to handling vaginal discharge

Criteria	Pretest	Posttest
Mean	85,3	86,7
Deviation Standard	9,46	10,6

Based on table 2, the data shows that the respondents before the health education (pretest) had a sufficient majority level of knowledge as many as 53 people (73.6%) with a minimum score of 64.3, a maximum score of 100, and an average mean score of 85.3. While the level of posttest knowledge in the majority of categories was sufficient as many as 54 people (75%) with a minimum score of 50, a maximum score of 100, and an average mean score of 86.7.

The results of this study are not in line with research conducted by Pradnyandari, et al (2019) which states that 89.6% of respondents a have good knowledge regarding how to handle vaginal discharge through good vaginal hygiene. The results of a similar study were also conducted by Febryary (2016) which stated that 61.7% of young women had good knowledge in handling vaginal discharge. The differences in the criteria and results of this study were due to differences in respondents, different instruments and ratings as well as the assessment criteria of the instruments used.

A person's knowledge of an object can have different levels of perception. This is influenced by several factors, including age, education, sources of information, socio-economy, culture, environment. Respondents in this study ranged in age from 11 to 14 years old who were adolescents in the early phase where in this phase the sense of curiosity tended to increase. In addition to the age factor, the majority of respondents in this study also have parents with a minimum high school education background, thus allowing the transfer of knowledge. Respondents in this study also 97.2% have their gadgets, making it possible to find more information as desired via the internet. Beside, 80.6% of respondents have also received information related to vaginal discharge.

# Description of adolescent attitudes in handling vaginal discharge

The description of adolescent attitudes related to handling vaginal discharge before and after health education is shown in table 3.

Table 3 Description of Adolescent Attitudes related to Handling of Leucorrhoea Before and After

Hea	1th Education	
Criteria	Pretest	Posttest
Good	15 (20,8%)	18 (25%)
Enough	44 (61,1%)	43 (59,7%)
Low	13 (18,1%)	11 (15,2%)
Score		
Min-Max	63-94,6	64,3-96,4
Mean	80,7	80,8
<b>Deviation Standard</b>	7,8	7,0

Based on table 3, the data shows that respondents before health education (pretest) had attitudes related to handling vaginal discharge, the majority was sufficient as many as 44 people (61.1%) with a minimum score of 63, a maximum score of 94.6, and an average mean score of 80.7. While the attitude of handling posttest vaginal discharge in the majority category was enough as many as 43 people (59.7%) with a minimum score of 64.3, a maximum score of 96.4, and an average mean score of 80.8. The results of this study are not in line with research conducted by Pradnyandari, et al. (2019) which states that 100% of respondents have good attitudes

regarding how to handle vaginal discharge through good vaginal hygiene. The results of a similar study were also conducted by Febryary (2016) which stated that 56.8% of young women had a good attitude in dealing with vaginal discharge. The differences in the criteria and results of this study were due to differences in respondents, different instruments and ratings as well as the assessment criteria of the instruments used.

Attitude is the reaction or response of someone who is still closed to a stimulus or object. This attitude is also an image or reflection that will be carried out by adolescents. A good attitude is manifested in a good response too, how adolescents can show readiness to react to an object in a certain way. Several factors that can shape attitudes include personal experience, knowledge, the influence of other people who are considered important, cultural influences, mass media, educational institutions, and emotional factors. Knowledge and attitudes will be the basis for the moral formation of adolescents so that in a person ideally there is a harmony between the knowledge they have and attitudes (Febryary, 2016). The better the knowledge a person has, the better the attacker's ability to behave.

## Description of personal hygiene behavior for adolescents

The description of adolescent behavior related to the prevention of vaginal discharge before and after health education is shown in table 4.

Table 4. Description of Adolescent Behavior related to the handling of vaginal discharge before and after Health Education

Criteria	Pretest	Posttest
Good	13 (18,1%)	17 (23,6%)
Enough	44 (61,1%)	44(61,1%)
Low	15 (20,8%)	11 (15,3%)
Score		
Min-Max	57-92	57,1-94,6
Mean	73,4	76,3
Deviation Standard	8,6	8,9

Based on table 4, it is found that the respondents before doing health education (pretest) have behaviors related to handling vaginal discharge, the majority is quite enough as many as 44 people (61.1%) with a minimum score of 57, a maximum score of 92 and an average mean score of 73.4. Meanwhile, the majority of posttest vaginal discharge management behavior was sufficient for 44 people (61.1%) with a minimum score of 57.1, a maximum score of 94.6, and an average mean score of 76.3. The results of this study are supported by research conducted by Febryary (2016) which states that 50.6% of young women have positive behaviors in dealing with vaginal discharge. Behavior is the result of various experiences of human interaction with the environment, which is manifested in the form of knowledge, attitudes, and actions that a person takes on his health. The main factors that influence behavior are attitudes, knowledge, self-concept, beliefs, values, and information. Then the supporting factors are facilities and infrastructure, and the driving factors are family and environment.

## The effect of audiovisual media health education on knowledge, attitudes, and personal hygiene behavior of adolescents in handling vaginal discharge

The results of the Wilcoxon Sign Rank Test Statistical Analysis for Adolescent Knowledge in Handling Leucorrhoea are shown in table 5. From the Wilcoxon test, the significance value of p = 0.275 (p> 0.05) was obtained, thus it can be concluded that there was no significant difference in the knowledge score of handling vaginal discharge between before taking action and after taking health education action.

Table 5: Wilcoxon Signed Rank Test Results of Adolescent Knowledge Levels Related to Handling of Leucorrhoea Before and After Health Education is Provided

Knowledge	n	Median (minimum – maximum)	p
Pretest	72	85,3 (64,3 -100)	
Posttest	72	86,7 (50 - 100)	0,275

Table 6.Wilcoxon Signed Rank Test Results of Youth Attitude Levels Related to Handling of Leucorrhoea Before and After Health Education

Variabel	n	Median (minimum – maximum)	p
Pretest	72	80,7 (63 -96,3)	0.973
Posttest	72	80,7 (64,3 - 94,6)	0,973

Table 7 Wilcoxon Signed Rank Test Results of Adolescent attitude Related to Handling of Leucorrhoea Before and After Health Education

Attitude		Median	
Attitude	n	(minimum – maximum)	p
Pretest	72	73,4 (57,1 -94,6)	0.002
Posttest	72	76,3(57,1-92,9)	0,002

The results of the Wilcoxon Sign Rank Test Statistical Analysis on the Attitudes of Adolescents in Handling Leucorrhoea in the Intervention Group are shown in Table 6. From the Wilcoxon test, the significance value was obtained  $p=0.973\ (p>0.05)$ , thus it can be concluded that there was no significant difference in the attitude score for handling vaginal discharge between before taking action and after taking action.

The results of the Wilcoxon Sign Rank Test Statistic Analysis of Adolescent Behavior in Handling Leucorrhoea are shown in table 7.

Based on the Paired T-test, the significance value of p=0.002 (p<0.05) was obtained, thus it can be concluded that there is a significant difference in the score of the behavior of handling vaginal discharge between before taking the action and after taking the action.

The average score of the knowledge level before health education was 85.3 and after being given health education with audiovisual media, the average score for the knowledge level of adolescents related to the handling of vaginal discharge was 86.7. This proves that audiovisual media health education can increase adolescent knowledge scores related to the handling of vaginal discharge by an average of 1.4. From the Wilcoxon test, the significance value of p = 0.275 (p > 0.05) was obtained, thus it can be concluded that there was no significant difference in the knowledge score of handling vaginal discharge between before taking action and after taking health education measures.

The average score of adolescent attitudes before health education was 80.7 and after being given health education with audiovisual media the average score of adolescent attitudes related to handling vaginal discharge was 80.8. This proves that audiovisual media health education can increase adolescent attitude scores related to handling vaginal discharge by an average of 0.1. From the Wilcoxon test, it was obtained the significant value p = 0.973 (p> 0.05), thus it can be concluded that there was no significant difference in the attitude score for handling vaginal discharge between before and after treatment.

The average score of adolescent behavior before health education was 73.4 and after being given health education with audiovisual media, the average score of adolescent behavior related to handling vaginal discharge was 76.3. This proves that audiovisual media health education can increase adolescent attitude scores related to the handling of vaginal discharge by an average of 2.9. From the Paired T-test, the significance value of p = 0.002 (p <0.05) was obtained. Thus, it can be concluded that there is a significant difference in the score of the behavior of handling vaginal discharge between before the action and after the action. The increase in scores obtained after the provision of health education was not very significant. This is due to other factors that the researcher cannot control directly.

Audiovisual media is one of the health promotion tools. Audiovisual is a medium that presents information or messages in an audio and visual manner (Notoatmodjo, 2012). Audiovisuals make a very big contribution to changes in people's behavior, especially in the aspects of information and persuasion. This aid provides a stimulus to hearing and sight, so that the results obtained are maximized. The choice of audiovisual media as a medium for health education can be accepted by respondents,

especially adolescent respondents. This audiovisual media gives the impression of health educators that are more interesting and less monotonous, thereby reducing the boredom of the respondents. Also, this media also displays motion, images, and sound that are more attractive and attractive.

#### 4. Conclusion

The level of knowledge of adolescents related to handling vaginal discharge before and after being given health education is sufficiently sufficient. However, the average score of the pre-test level of knowledge was 85.3 and the post-test was 86.7. Adolescents' attitudes related to handling vaginal discharge before and after being given health education were mostly sufficient. However, the average score of the pre-test attitude was 80.7 and the post-test was 80.8. Adolescent behavior related to the handling of vaginal discharge before and after being given health education, the majority is sufficient. However, the average score of pre-test behavior was 73.4 and post-test was 76.3. Health education using audiovisual does not have an effect on the level of knowledge and attitudes of adolescents in preventing vaginal discharge, but it does affect adolescent behavior.

#### 5. Suggestion

The results of this study for Schools are expected to be the basis for planning routine activities in providing health education and counseling to adolescents. For Puskesmas it is hoped that early detection of vaginal discharge in adolescents is expected. For further researchers it is hoped that further research can be carried out with more stringent techniques and methods in data collection and controlling confounding factors and variables.

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