



The Effect of Reproductive Health Education with Video Learning Multimedia and Education on the Increasing of Knowledge and Attitude About Prevention of Fluor Albus Pathology of Female Adolescent

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Abstract

Fluor albus is a problem that is often experienced by women of various ages. Most women in the world must experience vaginal discharge and 90% of women in Indonesia have the potential to experience vaginal discharge. Fluor albus in adolescents can actually be prevented. One way to reproductive health education that uses media that is interesting and easily understood by adolescents, one of which is with multimedia video learning media accompanied by education. The purpose of this study was to look at the effect of multimedia video learning along with education about reproductive health to increase knowledge and attitudes to prevent albus fluorine in young women. The research method uses a quasi-experimental design with pre-test post-test control group design. The study sample was 44 young women. Paired t-test and Anova test were applied to analyze data. The analysis showed that there were significant differences in the increase in the average value of knowledge ($p = 0,000$), attitudes ($p = 0.001$), and behavior ($p = 0,000$) after receiving multimedia and educational video learning. It can be concluded that multimedia video learning accompanied by education is appropriate to be applied in reproductive health learning activities, especially health care for reproductive organs because Multimedia Learning Video makes it easy for young women to understand and absorb information well so that it can provide a stimulus to act in preventing the occurrence of fluorine albus. Intervention through health learning models using multimedia can change the knowledge, attitudes, and behavior of preventing albus fluorine in young women.

Keywords: *Fluor Albus; Multimedia Video Learning; Education; Knowledge; Attitudes*

Introduction

Adolescence can be defined as the transition from childhood to adulthood, which limits the age of adolescents is the age of 12 to 24 years. In the stages of adolescent development, every teenager will go through 3 (three) stages, which at the level of development is a period that is vulnerable to disorders of

the reproductive organs, one of which is the occurrence of fluor albus or vaginal discharge (Abid et al., 2016).

Leucorrhoea is the secretion of fluid other than blood from the vaginal canal out of the ordinary, either smelling or not accompanied by itching in the local area. Leucorrhoea can occur physiologically and pathologically. The cause of physiological vaginal discharge is due to hormonal factors such as before or after menstruation, when sexual desire increases and during pregnancy. Whereas pathological vaginal discharge is caused by genital infections, foreign bodies, or other diseases of the reproductive organs (Nurul, 2010).

According to WHO 1 out of 20 adolescents in the world experience vaginal discharge every year, the number of women in the world in 2013 was 6.7 billion people and who had experienced vaginal discharge around 75% (Utami & Riawati, 2014). According to (Kaur et al., 2014) the prevalence of vaginal discharge (fluor albus) among South Asian adolescents who have experienced vaginal discharge is 79%. In Indonesia, as many as 90% of adolescent girls in Indonesia have the potential to experience vaginal discharge because Indonesia is a tropical climate area so that fungi, viruses, and bacteria easily grow, especially in the female area (Azizah, 2015).

Research shows, a long vaginal discharge even with mediocre symptoms, over time will damage the hymen because most vaginal discharge contains germs that can damage the hymen of the blood. In addition to damaging the blood membrane, the occurrence of vaginal discharge can cause discomfort and will cause various genital infections including vulvitis, candidiasis vaginitis, cervicitis, and endometriosis (Manuaba, 2009).

There are several inhibiting factors for healthy behavior in efforts to prevent pathological vaginal discharge, including the lack of individual or adolescent knowledge about vaginal discharge as well as improper attitudes that weaken a person's motivation to behave healthy lives in an effort to prevent pathological vaginal discharge. Good adolescent knowledge will increase knowledge in terms of reproductive health. (Potter & Anne, 2005).

According to Purnama (2013) said that the information obtained is very possible for someone to adopt values and knowledge that can affect thought patterns and actions. One source of information someone is through health education. Health education that can affect one's knowledge can be obtained from a variety of ways both from print media such as posters, leaflets, brochures, magazines, newspapers, stickers and pamphlets, as well as electronic media such as VLM, TV, radio, cassettes and slides. According to Asni (2018) multimedia video learning is the most suitable media used by health workers in providing health education.

The purpose of this study was to determine the effect of reproductive health education with multimedia video learning media and education on increasing knowledge about preventing pathological fluor albus (vaginal discharge) in adolescent girls.

Methodology

This type of research is an experimental research design with pre-test post-test control group design. This research was conducted in three different schools, namely SMAN 14, SMAN 24, and SMAN 26 Bone.

The population in this study were all teenage girls of class XI IPS (Social Science Study) SMAN 14, SMAN 24, and SMAN 26 Bone as many as 115. While the samples in this study were 44 samples

drawn by purposive sampling that is choosing a sample among the population the researchers wanted in accordance with specified criteria by researchers based on research to be conducted.

All data collected is recorded in a special form or master table and processed using statistics in accordance with the scale of measurement and research objectives. All data collected is then verified and completed in accordance with the real situation.

The process of data analysis is done by using certain statistical software that begins with the process of checking the normality of the distribution of the data tested using the Kolmogorov test with the provision that a value of $p > 0.05$ indicates normal data distribution while $p < 0.05$ indicates an abnormal distribution. In the normal data distribution group, the next data uses parametric tests and abnormal data uses non-parametric tests to see the effect of multimedia video learning accompanied by education.

Results and Discussion

Table 1 General Characteristics of Respondents in the Intervention and Control Groups

Age (Year)	Group			
	Intervention		Control	
	N	%	N	%
16	22	100	20	95,46
17	-	0	2	4,54
Total	22	100	22	100
Leucorrhoea prevention information source				
Parents	5	22,7	15	52,3
Print media	3	13,6	7	15,9
Electronic media	3	13,6	12	27,3
Internet	15	68,2	14	65,9
Health workers	7	31,8	12	43,18
Teacher	5	22,7	12	27,3
Friend	12	54,5	18	70,5
Others	4	18,9	9	20,5

Table 1 shows that in the intervention group namely the vlm group accompanied by education distribution of adolescents all were 16 years old as many as 22 adolescents (100%). whereas in the control group the most age distribution is at the age of 16 years as many as 20 people (90.9%) and as many as 2 people aged 17 years (1%). Sources of information on preventing vaginal discharge in the intervention group were mostly obtained through the internet as many as 15 people (68.2%), while information on preventing vaginal discharge in the control group mostly came from friends namely 18 people (70.5%).

Table 2 Differences in Pre-Test and Post-Test Mean Value Knowledge in Prevention of Young Women Albus Fluorine

Variable	Pre Test Mean±SD	Post Test Mean±SD	Δ Mean±SD	P-value
Knowledge				
Intervention	13.05 ± 1.91	16.18 ± 2.38	3.13 ± 0.47	0.000*
Control	12.91 ± 1.87	13.45 ± 3.70	0.54 ± 1.83	0.541*
P value	0.962**	0.004**		

*Paired t-test

**Anova

Table 2 shows the mean score of initial knowledge scores in the intervention group namely the vlm group and education by 13.5 and final knowledge by 16.18 with a probability value of 0,000 ($p < 0.05$). While in the control group the mean score of initial knowledge was 12.91 and the average score of final knowledge was 13.45 with a probability value of 0.541 ($p > 0.05$). So it can be concluded that there is an increase in knowledge in the intervention group that is given vlm as well as education and there is no increase in knowledge in the group that is only given education.

Table 3 Differences in the Average Pre-Test and Post-Test Attitudes on Prevention of Adolescent Albus Fluorine

Variable	Pre Test Mean±SD	Post Post Mean±SD	Δ Mean±SD	P-value
Attitude				
Intervention	41.77 ± 5.89	48.59 ± 8.43	6.82 ± 2.54	0.001*
Control	41.64 ± 6.06	45.14 ± 9.59	3.50 ± 3.53	0.136*
P value	0.996**	0.003**		

*Paired t-test

**Anova

Table 3 shows the mean score of initial attitude scores in the intervention group namely the vlm group and education by 41.77 and final knowledge by 48.59 with a probability value of 0.001 ($p < 0.05$). Whereas in the control group the mean score of initial knowledge was 41.64 and the mean score of the final attitude was 45.14 with a probability value of 0.136 ($p > 0.05$). So it can be concluded that there was an increase in attitude in the intervention group that was given vlm as well as education and there was no increase in attitude in the group that was only given education.

This study aims to assess the effect of multimedia video learning about reproductive health on increasing knowledge and attitude to prevent pathological fluor albus (vaginal discharge) in young women. The provision of health education in the form of this video is expected to make it easier for adolescents to improve their knowledge and attitudes towards preventing reproductive organ diseases, especially fluor albus or vaginal discharge in adolescents.

In this study it was seen that statistically there was a significant influence between knowledge and attitudes before and after the intervention. This is shown by the average score of knowledge in adolescents who were given knowledge and education before the intervention was 13.05 and after the intervention increased to 16.18 so there was an increase of 3.13. And the average score of attitudes in adolescents given vlm and education before the intervention was 41.77 and after the intervention increased to 48.59 so there was an increase of 6.52.

The results of this study are supported by research (Yessi, 2014) about the effects of education health with lecture and audio methods on cadre knowledge about awareness in Baki Sukoharjo District. This study concludes that there are differences in the knowledge score of cadres before and after health education is given by lecturing and audiovisual methods about BSE (Self Breast Examination).

These results are in line with previous studies showing that there is an increase in the knowledge of adolescent girls after getting health education about the prevention of pathological vaginal discharge against young girls (Fauziah, 2017). The results of the study (Reis et al., 2015) on several campuses in Portugal stated that reproductive health education in schools influences students' knowledge and attitudes about adolescent reproductive health.

The results of this study are also in accordance with Artaria's (2015) study which examined the effectiveness of reproductive health education with VLM (Video Learning Multimedia) media on the knowledge and attitudes of health cadres. This study concludes that reproductive health education with VLM media has proven to be effective in increasing the knowledge and attitudes of health cadres.

While other studies on the effect of multimedia video learning about reproductive health to increase knowledge, attitudes, and behaviors of vaginal hygiene in young women obtained $p = 0,000 < 0,05$, it shows that there is an effect of multimedia video learning on increasing vaginal hygiene knowledge in young women (Asni, 2018). The results of the study (Bachtiar, 2015) showed a change in the level of knowledge before and after health education was given to the video method and lecture method groups, these changes can be seen from the initial value of pretest 19.67 and posttest 22.07 with $p = 0.003$.

The results of the study Purnama (2013) prove that video media is more effective than media leaflets with a knowledge score difference of 1.65 points. In addition, video media makes teenagers more focused and interested in the material or message conveyed, this reflects the absorption of information more effectively by using the senses of sight and hearing in the form of video compared to only using the sense of sight, namely in the form of leaflets.

Research conducted Amy et al., (2014) in several schools in the United States states that adolescent reproductive health policies in schools offer a practical form to reach youth through information and health services to students who may not have access to education about reproductive health. Therefore reproductive health education in schools contributes positively to students so that students have the right knowledge and attitudes in the care of their reproductive organs.

Health education with vlm media accompanied by education can improve the knowledge and attitudes of young women. Knowledge is a stimulus for attitude formation, whereas attitude is a closed form of behavior towards the implementation of a behavior or action (Salam et al., 2016). According to Sumarah et al., (2017) Adequate knowledge is an intermediate determinant of Albus fluorine prevention behavior that can lead teenagers to make the right decision to be careful and alert to pathogenic fluor albus disease especially those that are pathological whereas good knowledge encourages the formation of better positive attitudes and in the end can encourage respondents to realize better behavior.

Conclusion

The influence of multimedia video learning is accompanied by education about reproductive health to increase knowledge and attitude to prevent fluor albus (vaginal discharge) in young women. For the sake of getting more information about this research, it is recommended that further research be carried out with more sample sizes and a long duration of research. Besides that, the researcher can

further develop this research and study more deeply by changing the type of qualitative research or other methods.

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