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Effectiveness of Educational Video Media to Increased Knowledge and Attitude in Knowing the Dangers of HIV/AIDS Disease In Adolescent Students Junior High School 2 Kupang City In 2020

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Abstract. Teenagers are the most vulnerable group physically and psychologically to HIV / AIDS infection, so teenagers become the focus of all strategies to combat the spread of HIV / AIDS virus, many educational media that can be used to provide information about the dangers and prevention of HIV / AIDS, one of which is video media. This study aims to find out the effectiveness of educational video media on the knowledge and attitude of students in knowing HIV / AIDS. This research was conducted with 3 research processes namely the Preparation stage, research data retrieval stage, and final research stage and this research using univariate and bivariate analysis where univariate analysis to find out the distribution and frequency of dependent variables (increased knowledge and attitude) and independent (educational video media) while the bivariate test used is paired t-test (Paired-sample t-test). The results of this study showed that educational video media is effective in increasing the knowledge and attitude of students in knowing the dangers of HIV / AIDS with a significance value of ϱ = 0.00 or less (<) value of α 0.05. Video media can be used as one of the media informing about the dangers of HIV / AIDS in adolescent junior high school students.

Keywords: *Effectiveness, Educational Video Media, Students, HIV/AIDS*

Abstrak Remaja merupakan kelompok yang paling rentan secara fisik dan psikis terhadap infeksi HIV/AIDS, maka remaja menjadi fokus dari semua strategi penanggulangan penyebaran virus HIV/AIDS, banyak media pendidikan yang dapat digunakan untuk memberikan informasi mengenaik bahaya dan pencegahan HIV/AIDS salah satunya yaitu media video. Penelitian ini bertujuan untuk mengetahui efektivitas media video edukasi terhadap pengetahuan dan sikap siswa-siswi dalam mengenal penyakit HIV/AIDS. Penelitian ini dilakukan dengan 3 proses penelitian yaitu Tahap persiapan, Tahap pengambilan data penelitian dan Tahap akhir penelitian serta penelitian ini mengunakan analisis univariat dan bivariat yang mana analisis univariat untuk mengetahui gambaran distribusi dan frekuensi dari variabel dependent (peningkatan pengetahuan dan sikap) dan independent (media video edukasi) sedangkan uji bivariat yang digunakan yaitu uji-t berpasangan (Paired-sampel t-test). Hasil penelitian ini menunjukan bahwa

media video edukasi efektif dalam meningkatkan pengetahuan dan sikap siswa-siswi dalam mengenal bahaya penyakit HIV/AIDS dengan nilai signifikansi ϱ = 0,00 atau lebih kecil (<) nilai α 0,05. Media video dapat digunakan sebagai salah satu media pemberi informasi tentang bahaya penyakit HIV/AIDS pada remaja siswa-siswi SMP.

Kata Kunci: *Efektivitas,Media Video Edukasi, Siswa/I, HIV/AIDS*

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Introduction

HIV (Human Immunodeficiency Virus) and AIDS (Acquired Immunodeficiency Syndrome) are diseases that continue to develop into global health problems in both developed and developing countries. HIV is caused by HPV (Human Papilloma Virus) HPV damages the structure of white blood cells that cause the immune system to decline and sufferers are easily exposed to other diseases. AIDS (Acquired Immunodeficiency Syndrome), is a collection of symptoms of the disease due to lowering the immune system caused by HIV (Handayani, 2017). In 2016, 36.7 million people were infected with HIV and 1.1 million were exposed to AIDS and an estimated 1.8 million people worldwide became infected with new HIV cases occur in 2016 and about 5,000 people got HIV every day (Matte, 2018).

HIV in Indonesia was first obtained in Bali Province in 1987 (Ministry of Health, Infodatin AIDS and HIV/AIDS Analysis, 2014). The number of HIV-positive cases from year to year is likely to increase in 2017 reported as many as 48,300 cases and AIDS cases up to 2017 by 102,667 cases, the largest proportion of HIV/ AIDS cases still in the productive age population 15-49 years. Can be transmitted through sex, blood transfusions, the use of alternating syringes, and mother to child (perinatal) (Ministry of Health, 2018).

NTT since 2014-2017 there are always new cases, in 2014 new cases of HIV amounted to 219 cases and AIDS in 383 cases, in 2015 people with HIV and AIDS

were not reported, in 2016 HIV cases amounted to 395 cases and AIDS in 2015 cases and in 2017, new cases of HIV increased with 657 cases and AIDS 354 cases. Based on the highest age group of HIV cases in 2017 the largest proportion was found in the 25-40 age groups, where the likelihood of transmission occurred in adolescence (NTT Provincial Health Office, 2018).

Cases of HIV/AIDS in Kupang city in 2017 continue to increase when compared to 2014. In 2017 there were 253 new cumulative cases from 2014-2017 with 1,268 cases. HIV/AIDS cases occur in the productive age group of 25-49 years and the cases occur most vulnerable at the age of 25-34 years (Kupang City Health Office, 2018). Meanwhile, there was a decrease in new cases in 2018 with the number of 138 cases but increased cumulatively from 2014-2018 to 1,406 cases. With the possibility of transmission in adolescence (Kupang City Health Office, Kupang City Health Profile 2018, 2019).

Adolescents are the most physically and psychically susceptible to HIV infection, so adolescents are the focus of all strategies for tackling the spread of the HIV/AIDS virus. Changes in youth result in a high desire to try new things they don't already know (Masae, Manurung, & Tira, 2019). The youth group is a population in the age range of 10-19 years.

The data shows that of the estimated 40 million people in the world who have been infected HIV, more than 95% of them are in developing countries. And young people today have become part of the AIDS pandemic with data suggesting that more than half of new cases infected with HIV are adolescents between the ages of 15-24. 50% of all infected cases are young. The majority of infected young people do not know that he or she is in fact infected and young people who engage in sex are at risk, few know that their partner is infected HIV or not (Berek & Dkk, 2018).

The causes of HIV/AIDS in adolescence are adolescents who become drug addicts, especially users of syringes, free sex, and other infections caused by sex. Lack of knowledge and attitude, and information so that adolescents are

increasingly at risk of contracting HIV/AIDS and where adolescent's knowledge currently determines patterns of behavior (Aisyah & Fitria, 2019).

The right strategy in HIV/AIDS prevention is to provide accurate information about the characteristics of the disease, how it is transmitted, and how a person can reduce the risk.

Health education in the form of health counseling is inseparable from the media. Media can help the implementation of public health education because the message conveyed can be more interesting and easy to understand, so as to increase knowledge and encourage targets to adopt positive behaviors towards health (Notoatmodjo, 2010).

Commonly used media has different effects depending on the number of senses used in receiving information or messages. Considerations in the selection of appropriate and effective media are tailored to the conditions and circumstances of the target. In addition, the media used also needs to be adapted to the times. One of the health education media that can be used is video media. Video media in addition to entertainment and communication media can also be used as an educational medium that is easy for people to understand from children to adults (Banik, 2017).

School is one of the educational environments where children spend most of their time and become a place to provide information and education on this health. Based on the data the highest HIV cases is in the age of 15-24 years. Therefore, it is necessary to provide information and health education on HIV/AIDS hazards under that age.

Providing information and health education about the dangers of HIV/AIDS is a form of HIV/AIDS prevention efforts, which has started to enter every high school since 2005. But HIV/AIDS affects many productive ages, including students, so the provision of health information and education is not only done in high school students, it is done in students at a lower education level, namely junior high school in hopes of preventing more adolescents from engaging in risky sexual behavior

and drug abuse. Therefore, teenagers among junior high school students need information and health education in identifying the dangers and prevention of the spread of HIV/AIDS (Santoso, Apsari, & Nabila, 2017). Based on the description, researchers need to conduct research on "Effectiveness of educational video media to increase knowledge in understanding the dangers of HIV/AIDS disease in SMPN 2 Kupang".

Method

The type of research used in this research is the pre-experimental design and the design is "one group pretest-posttest". This design does not have a comparison group (control) but has been made the first pretest observation that allows testing changes that occur after the experiment (treatment) using postest. The population in this study was all grade VIII students in SMPN 2 Kupang city which totaled 439 people where there were 14 classes and in each class, there were 32 students. The sample count in the study was 81 students. To find out the number of samples of each class in this study using proportional stratified random sampling techniques. The instrument used in this study was to use questionnaires for knowledge variables measured using closed question questionnaires and attitude variables using Likert scale questionnaires and approved ethics commissions (2020122-KEPK). Data analysis was conducted using univariate and bivariate analysis, univariate analysis was conducted to get an overview of the distribution and frequency of dependent variables (increased knowledge and attitude) and independent (educational video media), In this study the type of bivariate test used is paired t-test paired-sample t-test.

Result

SMPN 2 Kupang was built in 1960 and is located at Jalan Tom Pello No. 33 Oetete Village, Oebobo District, Kupang City, East Nusa Tenggara. The number of students of SMPN 2 Kupang in the 2020/2021 school year is 1260 students (class VII 352 students, class VIII students 439 people, class IX students 469 people). The

respondents in the study were 44 male (54.3%), while the female gender was 37 (45.7%). And respondents in this study had two age groups of 13-year-olds totaling 62 people (76.5%) and the 12-year-old age group is 19 (23.5%)

Table 1.
Distribution of Knowledge Frequency to The Dangers of HIV/AIDS Disease In Adolescent Respondents Before Being Given Intervention Using Video

No.	Category	Frequency	Percentage (%)
1.	Less	43	53,1
2.	Good	38	46,9
	Total	81	100

Based on table 1, most respondents in the category lacked knowledge about the dangers of HIV/AIDS disease such as the understanding of HIV/AIDS, the causes of HIV/AIDS, the way the virus was transmitted, and its prevention and knowledge of People Living With HIV (PLWH) in adolescents which were 43 people with a percentage of 53.1%.

Table 2.
Distribution of Knowledge Frequency to The Dangers of HIV/AIDS Disease In Adolescent Respondents After Intervention Using Video

No.	Category	Frequency	Percentage (%)
1.	Less	3	3,7
2.	Good	78	96,3
	Total	81	100

Based on table 2 obtained that the most respondents are in the category of both know about the dangers of HIV/AIDS disease such as the definition of HIV/AIDS itself, the causes of HIV/AIDS, the way the virus is transmitted, and its prevention and knowledge of PLWH to adolescents which is 78 people with a percentage of 96.3%.

Table 3.
Distribution of Frequency of Attitudes To The Dangers of HIV/AIDS Disease In Adolescent Respondents Before Being Given Intervention Using Video

No.	Category	Frequency	Percentage (%)
1.	Positive	33	40,7
2.	Negative	48	59,3
Total		81	100

Based on table 3, there were 48 respondents with a percentage of 59,3% respondents who were negative about the causes of HIV/AIDS, the spread of the HIV/AIDS virus among adolescents, the way of prevention, and the stigma arising against ODHA among adolescents.

Table 4.
Distribution of Frequency of Attitudes To The Dangers of HIV/AIDS Disease in Adolescent Respondents After Intervention Using Video

No.	Category	Frequency	Percentage (%)	Mean
1.	Positive	54	66,7	88.22
2.	Negative	27	33,3	
Total		81	100	

Based on table 4 found that the most respondents who were positive about the causes of HIV/AIDS, the spread of the HIV/AIDS virus among adolescents, the way of prevention, and the stigma arising from PLWH among adolescents were 54 respondents with a percentage of 66.7%.

Table 5.
Distribution of Pretest Results And Posttest Knowledge and Attitude of Video Media Experiment Group

Variable	Video Media Experiment Group			Sig. (2-tailed)
	Minimum Value	Maximum Value	Mean	
Knowledge				0.00
Pretest	54	100	76.65	
Posttest	69	100	94.49	
Attitude				0.00
Pretest	54	100	73.58	
Posttest	63	100	88.22	

Based on table 5, there can be a change in the value of knowledge and attitudes in students who are treated with educational video media. This is seen from the average value (mean) of knowledge pretest value of 76.65 which increased to 94.49 after being given treatment and the average value (mean) pretest value of 73.58 increased to 88.22 after being given treatment. Based on statistical test results using Paired-Sample T-test with a significance score of ϱ = 0.00 or smaller (<) a value of α 0.05 then the video media is effective against changes in the increased knowledge of class VIII students about the dangers of HIV/AIDS disease in adolescents.

Discussion

Health education media is a means or effort to display messages or information that the communicator wants to convey. Both through print, electronic (TV, radio, computer, and so on), and outdoor media. The health education media used in this study is a video medium for increased knowledge and attitudes in adolescent graders in Grade VIII about the dangers of HIV/AIDS disease.

1. Knowledge of class VIII Students of SMP N 2 Kupang City

   The level of knowledge of class VIII students in SMP N 2 Kupang city against the dangers of HIV/AIDS such as HIV/AIDS treatment, the causes of HIV/AIDS, the way the virus is spread, and its prevention and knowledge of ODHA in adolescents before being treated using video media is 43 respondents with a percentage of 53.1% in the category of less and 38 respondents with a percentage of 46.9% in the good category. Most respondents' knowledge of the dangers of HIV/AIDS in adolescents has not been in the category either.

   After being given the pretest, the researchers then treated it using educational video media. The measurement results after being treated using video media showed that none of the respondents were in the category of less (<55), 3 respondents with a percentage of 3,7% in enough categories (56-74) and 78 respondents with a percentage of 96,3% in a good category (>75). Thus, the majority of respondents experienced increased knowledge about the dangers of

HIV/AIDS disease in adolescents after being treated using educational video media.

2. The attitude of class VIII Students of SMPN 2 Kupang

   The attitude of class VIII students of SMPN 2 Kupang in addressing the dangers of HIV/AIDS disease to the causes of HIV/AIDS, the spread of HIV/AIDS virus among adolescents, and the stigma that arises against PLWH among adolescents before being treated using video media is 33 respondents with a percentage of 40.7% being positive and 48 respondents with a percentage of 59.3% were negative. The majority of respondents' attitudes in addressing the dangers of HIV/AIDS in adolescents were negative.

   After being given a pretest, the researchers then treated it using educational video media. The results of the measurement after being treated using video media showed that 54 respondents with a percentage of 66.7% had been positive and 27 respondents with 33.3% were still negative. Thus, many respondents experienced a change in attitude to be positive about the dangers of HIV/AIDS disease in adolescents after being treated using video media.

3. Effectiveness of Educational Video to Increase Knowledge and Attitude in Knowing the Dangers of HIV/AIDS Disease Among Adolescent Students /I SMPN 2 Kupang.

   The analysis results of the knowledge data showed a change in value in the video experiment group after being treated using video media. This was seen as an average (mean) knowledge pretest score of 76.65 which increased to 94.49 after being given treatment and the average value (mean) attitude of pretest value was 73.58 increased to 88.22 after being given treatment. Based on statistical test results by using Paired-Sample T-test with significance value ϱ = 0.00 or smaller (<) value α 0.05.

   So it can be estimated that educational video media is influential and effective towards increasing knowledge and attitude to the dangers of HIV/AIDS disease in adolescent students / I grade VIII SMPN 2 Kupang City.

The results of this study are the same as those conducted by Tarigan (2016) (Tarigan, 2016) which states that there is an influence on the increasing knowledge and attitude of students of SMAN 1 Berastagi using video media. Research conducted by Aspiawati (2018) (Aspiawati, 2018) also stated that using video media has a significant change to the change of year and attitude in SMKN 2 Makasar students.

The use of video media is very well used to help increase knowledge especially to emphasize the material that is very important for respondents to know. In addition, it makes it easier to convey information, facilitates understanding of the concept and absorption of materials by students, and helps researchers to present material in a directional and interesting way so that the objectives of the research can be achieved. One of them is an effort to increase the knowledge of teenagers about the dangers of HIV/AIDS disease is through health education by using educational video media in SMPN 2 Kupang.

The increase in attitudes towards positivity is influenced by exposure to mass media or information. By providing information about the dangers of HIV/AIDS in adolescents using video media, obtained knowledge that will affect a person's attitude, in this case, is addressing the dangers of HIV/AIDS in adolescents. Good knowledge possessed by a student will enable a change in a good attitude from within the individual.

The ability of video media to improve knowledge and attitude was also expressed by Mubarak, et al (2011) in Banik (2017) which stated that video can speed up the process of receiving information into life and affect one's emotions through the senses. This media also allows individuals to remember 50% of the information viewed and heard, so as to increase knowledge and change attitudes in a positive direction.

In this study, there were also respondents who did not experience an increase in knowledge or attitude. This can happen because this research does not do face-to-

face so it cannot monitor or conducts discussions, so many ask questions and make respondents do not understand.

Conclusion

From this research can be concluded that educational video media is effective in increasing knowledge and improving attitudes in knowing the dangers of HIV / AIDS in adolescents. With a significance value of ϱ = 0.00 or less (<) the α value = 0.05. It is expected that schools and health institutions can use video media as a medium of learning and information to improve the knowledge and attitudes of adolescents related to the dangers of HIV / AIDS and for other researchers to use video media as a material for the development of health media for behavioral changes about the dangers of HIV / AIDS. In addition, it can compare with other educational media such as leaflets or power points.

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