## Effectiveness of Health Cadres and Video Towards Knowledge About HIV/ AIDS Prevention In Balecatur Village, Sleman, Yogyakarta

Dhesi Ari Astuti<sup>1</sup>, Mega Ardina<sup>2</sup>, Nurul Kurniati<sup>1</sup>

Department of Midwifery, Faculty of Health Science, Universitas 'Aisyiyah Yogyakarta, Jl. Ring Road Barat 63, Gamping, Sleman , Yogyakarta, Indonesia 55292

Department of Communication, Universitas 'Aisyiyah Yogyakarta, Jl. Ring Road Barat 63, Gamping, Sleman , Yogyakarta, Indonesia 55292

Email: dhesi\_stikesayo@yahoo.co.id

## ABSTRACT

- *Background:* HIV (Human Immunodeficiency Virus) / AIDS (Aquired Immune Deficiency syndrome) is a global emergency problem. In the world, more than 20 million people died while 40 million people were infected. HIV/AIDS is one of the biggest threats to the socioeconomic development and stability of developing countries. In an effort to improve one's knowledge and attitudes, it is necessary to carry out health promotion activities to increase knowledge and preventive efforts in the community.
- *Objectives:* The purpose of this study was to determine the effectiveness of health cadres and video toward knowledge about HIV/AIDS in Balecatur Village, Sleman.
- Methods:The design of this research is a quasi-experimental study with a pretest-posttest two group design<br/>consisting of two groups, i.e. groups that are treated with health promotion with video media<br/>and groups that are treated with health promotion by cadres around HIV / AIDS (38 respondents).<br/>Data collection using a questionnaire and data analysis using univariate and bivariate with Paired<br/>T Test.
- **Results:** There were differences in the average knowledge of the assistance group by cadres before and after the intervention (12.01) and the difference in average knowledge of the video group before and after the intervention was 8.56. The results of the statistical test of the knowledge with mentoring group by cadres with p-value = 0.001, it means that there are significant differences in the knowledge of respondents before and after cadre mentoring. The statistical test results of group video knowledge with p-value = 0.001, it means that there are significant differences in respondents, knowledge before and after video intervention. Conclusion: The mother's knowledge has improved after good health promotion through cadre assistance and with video media.
- *Conclusion:* Health promotion can be carried out by using media and optimizing the quality of resources (cadres) in the community in order to increase knowledge about HIV/AIDS prevention.

Keywords: Cadres, HIV/AIDS, Video, Knowledge

### **INTRODUCTION**

HIV (Human Immunodeficiency Virus)/AIDS (Aquired Immune Deficiency syndrome) is a global emergency problem. Worldwide more than 20 million people died while 40 million people were infected. HIV/AIDS is one of the biggest threats to the socioeconomic development, stability of developing countries. HIV / AIDS problems such as the phenomenon of the iceberg must be overcome through various aspects. Promotive efforts as part of Sustainable Development Goals (SDGs) must be implemented. In 2015, 36.7 million of the world's population were affected by HIV and 1.1 million were affected by AIDS. Around 5700 people get HIV every day (1). In Indonesia, HIV/AIDS first discovered in Bali Province in 1987. The Ministry of Health of the Republic of Indonesia has stated that as of December 2010, there were 24.131 AIDS cases in Indonesia in 300 districts / cities in Indonesia (2). Indonesia is a country with a high incidence of HIV/ AIDS. In 2015, the incidence of HIV in Indonesia was 30.935 people and AIDS was 7.185 people (3). Based on 2018 data from the Head of the Section of Prevention and Control of Infectious Diseases, the Disease Management Division of the Yogyakarta District Health Office recorded the highest number of HIV cases in the local area compared to regencies / cities in the Special Province of Yogyakarta. namely reaching 915 cases, Yogyakarta City with 859 cases and Bantul District with 857 cases, and the fewest in Kulon Progo District which only 201 cases.

Based on Astuti's research, 2012 (4) along the Wates road is a hotspot for sexual services under the guise of salons and massage parlors. Indirect sex workers are a key population in the spread of HIV/AIDS because they often change partners and do not use protective condoms. The results of the study stated that there were 2 sex workers who were HIV positive and underwent antiretroviral (ARV) treatment.

Implementation of activities in health promotion requires health promotion media, that is, by what means used by health promotion actors to deliver health messages, provide or enhance knowledge and attitudes about health or transform health behavior to the target (5). Cadres and video media have been proven in previous studies to have influence in knowledge, attitudes or behavior. The purpose of this study was to determine the effectiveness of HIV AIDS cadres and video media with knowledge of HIV AIDS in Balecatur Gamping Village Sleman DIY.

### MATERIALS AND METHODS

The design of this research is a quasiexperimental study with a pretest-posttest two group design consisting of two groups, i.e. groups that are treated with health promotion with video media and groups that are treated with health promotion by cadres around HIV/AIDS (38 respondents). Data collection using a questionnaire and data analysis using univariate and bivariate with Paired T Test.

## **RESULTS AND DISCUSSION**

The characteristics of the research responses are explained in the following table.

		-	
Characteristic	F	%	
Education			
Elementary School	5	26.3	
Junior High School	2	10.5	
Senior High School	8	42.1	
University	4	21.1	
Marriage status			
No Married	1	5.3	
Married	13	68.4	
Widowed	5	26.3	
Occupation			
Not working	5	26.3	
Working	14	73.7	

Based on **Table 1** the majority of education at the senior secondary or high school level were 8 respondents (42.1%). Characteristics of cadre marital status showed that 13 respondents (68.4%) were married, while for the majority of work they worked for 14 respondents (73.7%).

A study in five provinces conducted by the Ministry of Health showed a comprehensive increase in knowledge about HIV and AIDS among young people (aged 15-24 years) in the general population, from 11.4% in 2010 to 20.6% in 2011, with the same proportion for men and women. More than half of young people know that AIDS cannot be transmitted through food sharing, and two-thirds answer correctly that people who look healthy can be infected with HIV. In another 2011 study, only 22% of junior high school students in grade 2 of high school had comprehensive knowledge about

HIV transmission, and 64% still had misconceptions about HIV (6).

Variabel	N	Min	Max	Mean	Δ Mean	SD	
Knowledge of Assistance Group by Cadre							
Before	19	37.5	87.5	73.51	12.01	12.02	
After	19	78.13	93.75	85.52		4.3	
Video Group Knowledge							
Before	19	59.38	96.88	81.57	8.56	8.89	
After	19	71.88	100	90.13		7.48	

The difference in average knowledge of the assistance group by cadres before and after the intervention was 12.01. The difference in average knowledge of the video group before and after the intervention was 8.56.

### **Univariate Analysis**

### Knowledge of Assistance Groups By Cadre

The results of the study showed that the average difference in knowledge of the assistance group by cadres before and after the intervention was 12,01. Health cadres were workers who came from the community, were chosen by the community themselves and worked voluntarily to become the organizer of the posyandu (8). Increased knowledge in groups accompanied by mobile cadres because of the two-way communication given by cadres about HIV / AIDS information so that it can affect the increase in information held by mothers.

#### Group Knowledge with Video Media

The results obtained differences in the average video group knowledge before and after the intervention of 8.56. Audiovisual media health education is considered effective for delivering messages to the public compared to health education without the media or only by media lectures and discussions that are still conventional in nature. This is in line with the "Edgar-Dale learning experience cone" which says that learning experiences gained by viewing videos and demonstrations will be absorbed in memory by as much as 50%, if added again with participant participation for discussion and questions and answers then the material will be absorbed in memory as much as 70%. Audiovisual media is able

to stimulate the senses of hearing and vision so that the results obtained are more optimal 7.

Increased knowledge is also influenced by the level of education. Education influences knowledge because a person's level of education will influence the response coming from outside. Educated people will think about the benefits they might get from the idea. Highly educated mothers more easily absorb information so that they have a better perception than those with secondary or basic education (8).

# Table 3. Knowledge of group assistance by cadres andvideo media

Variabel	p-value
Knowledge of Assistance Group by Cadre	0.001
Video Group Knowledge	0.001

The statistical test results of knowledge of the group assisted by cadres with p-value=0.001 smaller than the value of  $\alpha$ =0.05 means that statistically there are differences in the mean knowledge of respondents who are accompanied by cadres who are meaningful before and after one cadre mentoring. Statistical test results of group video knowledge with p-value=0.001 smaller than the value of  $\alpha$ = 0.05 means that statistically there are differences in the mean knowledge of respondents who intervened in videos that were significant before and after one intervention with video.

### **Bivariate Analysis**

## Effectiveness of Mobile Cadre Health Promotion Media on HIV / AIDS Knowledge in Balecatur Sleman Yogyakarta

The results of statistical tests found that the health promotion of mobile cadres statistically influences knowledge. This is because the cadres are members of the community so it is easy to carry out their duties. Health cadres who are active in the community will bring a change in behavior in the community. The facilitator plays an active role as an agent who provides positive and directive input based on his knowledge and experience and exchange ideas with the knowledge and experience of the community he is assisting, raise public awareness, convey information, conduct confrontations, conduct training for the community.

Knowledge is also statistically influential due to age maturity. The more mature enough, the level of maturity

and strength of a person will be more mature in thinking and working. In terms of public trust a person who is more mature is trusted from someone who is not yet of high maturity. Age is very influential on a person's knowledge and awareness, the more age someone has, the maturity level and strength of a person will be more mature in thinking and acting. There is a physiological process that causes certain changes, both qualitative and quantitative that are physiological and psychological. This is as a result of the maturity of his soul and influences his knowledge (9).

## Effectiveness of Video Health Promotion Media with HIV / AIDS Mobile Cadres on HIV / AIDS Knowledge in Balecatur Sleman Yogyakarta

Media that can be used in providing information about efforts to prevent the spread of HIV / AIDS is video playback. Video learning media is an educational media that contains audio and visual elements, so as to provide clear information on the messages conveyed. The advantage of video media is that it can show back movements, messages using certain effects so as to strengthen the learning process. The weakness of video is that it uses electricity, requires expensive and complex equipment, audience attention is difficult to master, participation is rarely noticed (10).

Statistical test results obtained mean differences in the knowledge of respondents who intervened in a meaningful video before and after one intervention with video. This result proves that the provision of health education with audiovisual media has more effect on increasing knowledge than those who do not use audiovisual media. Harginson explained that learning by seeing can absorb 50%, and hearing 10%, so that providing health promotion using video media students can understand 60% of the material delivered (11). The results of this study are in line with the relationship between providing counseling about HIV / AIDS with knowledge of Banjarbaru Midwifery Academy students on the incidence of HIV / AIDS. Students who received counseling about HIV / AIDS had 4.206 times better knowledge than female students who did not receive counseling. The provision of health education affects favorably on knowledge related to individual health (12). Counseling with audio visual and conventional media can affect the increase in knowledge (13).

Health promotion through mobile cadres is more effective supported by Wroblewska, L. et al (2016) (14) that mentoring using Mentors is considered to be an appropriate, acceptable, and sustainable training method for capacity building. This assistance is very relevant for arrangements with HIV prevalence because it does not require expensive costs. Research Nabunya et al (2015) (15) mentions that mentoring has the potential to increase HIV / AIDS knowledge by dispelling HIV myths and increasing desired HIV / AIDS beliefs and prevention attitudes towards HIV. Other research that supports that mentoring is very influential in Shroufi et al, which states that the mother to mother mentoring program is very useful in providing a lot of information so that it brings beneficial behavior changes.

## CONCLUSION AND RECOMMENDATION

The mother's knowledge has improved after good health promotion through cadre assistance and with video. As a suggest health promotion can be carried out by using media and optimizing the quality of resourcs (cadres) in the community in order to increase knowledge about HIV/AIDS prevention.

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