The 2<sup>nd</sup> International Multidisciplinary Conference 2016 November 15<sup>th</sup>, 2016, Universitas Muhammadiyah Jakarta, Indonesia Nazarwin Saputra, Differences Influence Of Health Education Hiv/Aids With Brainstorming method and Teaching Using Audio Visual Media Studies Against Knowledge Senior High School 4 South Tangerang: 661-665

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# DIFFERENCES INFLUENCE OF HEALTH EDUCATION HIV/AIDS WITH BRAINSTORMING METHOD AND TEACHING USING AUDIO VISUAL MEDIA STUDIES AGAINST KNOWLEDGE SENIOR HIGH SCHOOL 4 SOUTH TANGERANG

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## **Abstract**

Teenagers are enough potential support group for development of HIV AIDS epidemic. In Indonesia, there were the increasing prevalence of HIV AIDS cases and most cases are in age group 20-29 years in 2010. The prevention efforts here is to change risk behavior through health education, in this study just covered up to knowledge on method brainstorming dan lectures using audio visual media. The aiming of this research is to analysis differences influence of health education HIV/AIDS with brainstorming method and teaching using audio visual media studies against knowledge between before and after intervention. This study used quasy experimental design. In this design used two group: group brainstorming dan group lecture with audio visual media. The sample of this research are 32 respondents who are divided into two group. Each groups has 16 respondents. Technique sampling in this research is system random sampling. Treat done one time as well as pretest and post test. The analysis data used analysis univariate and bivariate; t test. The result show significant difference in knowledge between before and after HIV AIDS health educationintervention on group of student who get HIV AIDS interventionwith health education intervention with brainstorming method (p value = 0,0001). There are significant difference in knowledge between before and after HIV AIDS education intervention on group of student who get HIV AIDS intervention with health education lecture method with audio visual media (p value = 0,0001). There was no difference in the influence of HIV AIDS health education with brainstorming method and lecture with audio visual against the knowledge of the student senior high school 4 south Tangerang (p value = 0,566). Value of effectiveness of group brainstorming is 100%. While the respondents who the increasing the knowledge in the lecture group with audio visual media are 15 respondents. The effectiveness in this group is 93,75%. Differences influence of health education HIV/AIDS with brainstorming method and teaching using audio visual media studies against knowledge Senior High School 4 South Tangerang is 6,25%. Conckusion of this research is no difference in the influence of HIV AIDS health education with brainstorming method and lecture with audio visual against the knowledge of the student senior high school 4 south Tangerang.

Keywords: Health education, HIV AIDS, brainstorming method, lecture, audio visual media, knowledge

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## **INTODUCTION**

ccording to WHO (World Health Organization) in 2009 there were 33,4 million people living with HIV (Human Immunodeficiency Virus). In the period ofquarterly in 2010 there were additional cases of AIDS as many as 1,206 cases of the ratio between male and female 3: 1. One prevention program of HIV-AIDS is with counseling or education to emphasize that the pair have alternated enables high risk of infection with HIV. Health education programs can be developed in accordance with the mental and needs. Schools as an educational institution have ample opportunity to be a place dissemination of information by utilizing the school's health unit as one of the programs of primary care is expected to increase knowledge of HIV-AIDS prevention. The cumulative proportion highestcases of AIDS in the age group of 20-29 years, the preventive measures should be performed at the age of 20 years or the period of school. 1

Health education will have a good output when the process using the methods and media are also good. One method is the health education lectures and brainstorming debriefing. Good lecture method used in high and low education group. Brainstorming methods like group discussion in which each participant can provide answers and responses.

A good method should be supported by the media in the educational process as a tool to deliver educational materials. The results showed that the change of knowledge in the use of media booklet. On the other research, there is increasing knowledge through media partner card. Based on other research studies that researchers have an affinity for the media not only transmit information via visual only. Researchers wanted to know the effect of the use of audio-visual media is expected to further increase knowledge. Researchers conducted preliminary studies in several schools in the area south Tangerang and found that in SMAN 4 Tangerang Selatan has a level of knowledge is lower than some other schools. Based on the background above, the researchers have shown an interest to investigate the influence of HIV AIDS health education with brainstorming and lectures method using audiovisual media to the knowledge of students of SMAN 4 Tangerang Selatan.

# **METHODOLOGY**

The method used to test for differences in the effect of health education methods of brainstorming and lectures using audiovisual media to knowledge is *quasy* experiment. To control the bias post-test performed on the same day as the intervention.

The population in this study were all students of SMAN 4 TangerangSelatan. Samples were taken by using random sampling techniques that meet the criteria inclusive among students of SMAN 4 Tangerang Selatan grade 10 and willing to follow the health of HIV-AIDS education as well as the whole series of the research phase. Researchers took 16 people to the intervention group and 16 people as a control group. This study also fulfilled some ethical principles such self-determinants, anonymity, confidentiality and protection from discomfort.

Instruments used are questionnaires that the validityhave been tested and documenter video of HIV AIDS sourced from the web side commission on AIDS prevention that can be public accessed. Data processing is done by several stages including editing, coding, data entry and cleaning data.

Data were analyzed by univariate analysis to see the distribution and presentation of each variable. Bivariate analysis conducted with two different test dependent mean to see the effect of exposure to health education methods before and after education (pre post-test). Steps that must be

<sup>&</sup>lt;sup>1</sup> Kemenkes RI, Laporan triwulan situasi perkembangan HIV AIDS di Indonesia. Kementerian Kesehatan. PP&PL Kemenkes RI, 2010)

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done first is the normality test, having known the result of normal distribution then tested by t test dependent. If the results are abnormal then the researcher tested the non-parametric; Wilcoxon test.<sup>2</sup>

Independent means two different test is used to determine the differences between the lectures and brainstorming. Stages to go through them determine the difference between pre-test and post-test in each group, homogeneity test and independent t test analysis. If the p value <0.05 then H0 is rejected and it means there is a significant difference.

## RESULT AND DISCUSSION

SMAN 4 Tangerang Selatan is a public school that are on the road of WR. Supratman No. 1 District of CiputatTimurTangerang Selatan, statistical number 3013004 10010. That school was opened in 1994. Results of univariatefound that student knowledge in average in obtained before HIV AIDS health education for brainstorming is 6,03 (C195%: 5,6 to 6,4), the median 6,25 with a standard deviation 0.69.

Knowledge of students before HIV AIDS health education intervention with audio-visual lecture was 6,25 (CI95% 5,7 to 67), the median 6,25 with a standard deviation 0,93.

The results of the analysis obtained an average knowledge of students after HIV AIDS health education intervention for brainstorming 7,5 (CI95%: 7,2-7,8), with a standard deviation 7,5 median 0,5.Students knowledge after the intervention of health education HIV AIDS with audio-visual lecture with a mean of 7,5 (CI95%: 7,03 to 8,15), median 8,0 with a standard deviation 1,5.

The results of the analysis of normality method of brainstorming and using audio-visual lectures in normal distribution was tested using the Kolmogorov - Smirnov Z.

Table 1.The distribution of students' knowledge difference between before and after intervention in brainstorming group and lectures with audio visual

Metode	P Value	n	t
Brainstorming	0,0001	16	-9,5
Audio-visual lectures	0,0001	16	-6,2

T test results dependent on brainstorming and using audio-visual lecture showed the p value 0.0001 is therefore concluded that there are significant differences before and after intervention knowledge either grouped brainstorm and lecture with audio-visual equipment. T value is negative, it shows their added knowledge pretest value smaller than the post-test. The t value indicates a significance influence intervention. T Values of brainstorming group is 9,5 while audio visual lecture -6.2

Table 2.Distribution of the difference in knowledge score and standard deviation in both groups

Metode	Mean	SD	P Value	n
Brainstorming	1,5	0,6	0,56	16
Audio-visual lectures	1,3	0,8		16

<sup>2</sup>Rosyari N. Perbedaaan pengaruh intervensi antara media kartu jodoh dengan media lembar balik terhadap peningkatan pengetahuan gizi dan faktor yang berhubungan dengan ibu balita di kecamatan babelan kabupaten Bekasi. Skripsi. Jakarta. FKIK UIN JKT. 2008

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Results of independent t test showed that the degree of difference between the average difference in HIV-AIDS knowledge score after and before education between the two groups was 0,56. Thus at alpha 5% there is no difference in the average difference in HIV-AIDS knowledge score significantly (p value: 0,.56).

Group of brainstorming dependent t-test, p value: 0,0001 then there is a significant difference between the students' knowledge before and after the intervention in group brainstorming. The discussion group is one method that can make a more active participant in the implementation of health education. Brainstorming method is a method of modification of a discussion group which is basically the same. The difference at the beginning of the fishing group leader with a problem or a response. Responses are accommodated on board.<sup>3</sup>

Audio visual lecture group with dependent t-test, p value: 0,0001 thus no significant difference between the students' knowledge before and after the intervention group with audio visual lecture. The lecture method is the most traditional way of teaching and has long run in order to increase knowledge. This is sometimes boring it would require a certain skill with some modifications. Lecturing on this research given the group of respondents who went to school on the first level. According to Notoadmodjo lecture was well used in the group of highly educated and also low.<sup>3</sup>

Based on the results of the study showed there is no significant difference between increased knowledge of HIV AIDS (the difference between knowledge score HIV AIDS before and after the health education intervention) in the group of students who received health education of HIV/AIDS with brainstorming and lectures with audio visual media (p value: 0,56). The lack of significance could be due to other factors such as perception, motivation and experience.

Value effectiveness of group brainstorming is 100%. Value effectiveness lecture with audiovisual media is 93.75%. Thus the difference in the effectiveness of the methods of brainstorming and lectures with audio-visual media is 6.25%. To be more effective in increase the knowledge is the student should have an aware attitudeand health behaviors and avoid deviant behavior can be closer towards HIV/AIDS. Necessary preventive steps from related parties are better planned and sustainable in order to prevent the public in general and youth in particular. In this study, the health educator in both groups was a stranger so that it can affect the absence of meaningful educational effectiveness between the two methods. Success in conveying the information is determined by the nature and quality in information that is received and this in turn is determined by the nature and quality of the relationship between the individuals concerned.

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