

# The influence of the HIV/AIDS program on the knowledge and attitudes of the labourer in the building construction project of the Faculty of Engineering, University of Hasanuddin, Indonesia

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## **Abstract**

*This study attempts to analyze the differences of knowledge and attitudes of construction labours of Engineering Faculty Unhas, Gowa with methods of communicating information and education as well as the screening. In response to the prevention of HIV/AIDS at work. This study using the method was an experiment quasi pre and post-test design with the application of two group pre and post. With different treatment given a few and observed every treatment. This study found that there is the influence of intervention with the IEC media methods before and after interventions affecting knowledge and attitude labourers of HIV/AIDS, and some the influence of intervention with the method the screening before and after interventions affecting knowledge and attitudes labourers about HIV/AIDS. Based on our research findings, there need to be continuous interventions to increase knowledge, much efforts to prevent sexually transmitted infection and HIV/AIDS and check periodically of HIV/AIDS.*

**Keywords:** *attitude, construction labourer, HIV/AIDS prevention program, Indonesia, knowledge*

## **Introduction**

Until now, there is no preventive vaccine or cure for AIDS.<sup>1</sup> AIDS is an abbreviation of Acquired Immune Deficiency Syndrome means a collection of various symptoms of the disease.<sup>2</sup> The AIDS virus is known as HIV (Human Immunodeficiency Viruses).<sup>3</sup> Since 1986, the name of this virus has been recommended in the International Committee on Taxonomy of Viruses substituting the name Lymphadenopathy Associated Virus (LAV) given by L. Montaigner of the Institute Pasteur Paris.<sup>4</sup> Robert Gallo from the US National Cancer Institute also had to name Human T-Lymphocyte Virus Type III (HTLV-III) virus.<sup>5</sup>

The AIDS case in decades has a sharp increase since cases firstly reported by Gottlieb and colleagues in Los Angeles on June 5, 1980.<sup>6</sup> UN-AIDS (United Nation Program on HIV/AIDS) said in 2014, 36.900.000 people live with HIV.<sup>7</sup> The number of people living with HIV continues to increase, most people access global art and as a result live longer, healthy life.<sup>8</sup> In

the same time, new although HIV infection has declined and in 2014, about 2 million people infected HIV and 1.2 million people died of disease aids related.<sup>9</sup>

HIV epidemic in countries by certain generalization, such as Cameroon, Central African Republic, Guenia Equitorial, Lesotho and Sierra Leone, more than 80 adolescents do not have sufficient knowledge of HIV.<sup>7</sup> WHO noted productive ages of 15-24 years old are the group most vulnerable. While youth group usually did not have access information and services adequate.<sup>10</sup>

Labors mobility or displacement of local or international and a tendency the spread of HIV.<sup>11</sup> There any correlation meaningful labors mobility to the inclination of the transmission of HIV because they consisting susceptible apply behavior is risky such as mining, plantation, transportation, migrant labors, and development a construction project.<sup>12</sup>

Makassar City is the epicenter of HIV transmission in South Sulawesi because of high mobility Labors. Makassar City is the highest the HIV/AIDS 7.700 in 2016, among all districts/towns in South Sulawesi totally 9.871.<sup>13</sup> The number of most cases occurred second place is district Gowa reporting of cases of HIV/AIDS as much as 124 case. In this district is the locus of Engineering Faculty Unhas construction project that employ migrants in the number of many with the high mobility.<sup>10</sup> High mobility Labors did not bring his wife to work so that opened a big chance get sexual service from the Labors sex as a manifestation of the fulfillment of a biological need.<sup>14</sup>

According to Retno, 2013 in Akhmad Rianor Asrari Puadi, M. Bagus Qomaruddin, in 2018 said that Labors exposure to HIV/AIDS would increase from male Labors who migrating and far from family for a long time. Therefore, prevent and combat HIV/AIDS in the workplace is one of the strategies to break the chain transmission of HIV/AIDS have been attacking the general public.<sup>15</sup> Based on this background, there are considered important to digging information HIV/AIDS in the project of Engineering Faculty Unhas Gowa.

## **Methods**

### ***The type and research design***

The methodology used experiment kausi pre and pos-ttest design by the application of two group pre and post. The measurement were doing before and after the intervention.

### ***The research phase***

The first stage, the researcher prepares research materials such as projectors + laptops. The second stage, the researcher distributes questionnaires to the selected sample. The third stage, researchers intervened by distributing IEC media and films about HIV/AIDS. The final stage is to distribute questionnaires to the same people.

The first phase, researchers conducted preparation of materials research as projector + laptop. The second phase, distributes questionnaires in samples chosen. The third stage, researchers conducted intervention by distributing media IEC and films about HIV AIDS. The latter is the by distributing questionnaires on the same person.

In the intervention group 1 given education with the IEC method and group 2 given intervention the screening film, on each occasion they were 1 times.

### ***Population and Sample***

Population in this study all Labors as many as 642 laborers consisting of the 102 marble Labors, 162 ceramic Labors, 138 iron Labors and 240 finishing.<sup>16</sup> While the sample in this study were

some of the project Labors as many as 104 people. Estimation determined the sample using Slovin formulas.<sup>17</sup> Based on the formula the total sample is 86 rounded to 104 to avoid any drop out of a total of 10 % of required. The sampling technique used Stratified Random Sampling techniques with total samples gathered will be divided proportionally evenly for each type of work.<sup>18</sup>

### **Research instrument**

The materials used during the research included projectors + laptops, films about HIV/AIDS and Information and Education Communication Media (IEC) and questionnaires.

### **Processing and Presentation of Data**

The data analysis was carried out with intent to see whether or not there is the influence of IEC interventions and HIV/AIDS film screenings on Labors' knowledge and attitudes. Data were analyzed and interpreted by testing hypotheses using a computer program SPSS 14.0 univariate and bivariate analysis phase.<sup>19</sup> The Wilcoxon test used to analyze differences in knowledge and attitudes before and after the intervention.

## **Results**

### **Distribution of Pre-Test and Post-Test Results for Intervention Groups 1 and 2 Knowledge**

**TABLE 1.** Description of the results of the pre-test and post-test questions in the intervention groups 1 and 2 about labors knowledge of HIV/AIDS

No	Item Knowledge question	Intervention 1				Intervention 2				Intervention 2							
		Pre-test (n)		Post-Test (n)		Pre-test (n)		Post-Test (n)		Pre-test (n)		Post-Test (n)					
		Correct	%	False	%	Correct	%	False	%	Correct	%	False	%	Correct	%	False	%
1.	What is the meaning of HIV? A virus that attacks the human immune system	42	80.8	10	9.2	47	90.4	5	9.6	46	86.5	7	13.5	47	90.4	5	9.6
2.	Do you think the cause of AIDS is? Virus	25	48.1	27	51.9	47	90.4	5	9.6	24	46.2	28	53.8	46	88.5	6	11.5
3.	The HIV virus is in? Blood, vaginal fluids	27	51.9	25	48.1	47	90.4	5	9.6	26	50.0	26	50	47	90.4	5	9.6
4.	How does HIV transmission occur? Sperm and blood fluids	23	44.2	29	55.8	46	88.5	6	11.5	16	30.8	36	69.2	45	86.5	7	13.5
5.	How long does it take for the HIV virus to develop into AIDS? 5 years	23	44.2	29	55.8	37	71.2	15	28.8	29	55.8	23	44.2	39	75	13	25
6.	At What stage does the virus live in the human body without symptoms? Clinical latency stage	30	57.7	22	42.3	40	76.9	12	23.1	24	46.2	28	53.8	39	25	13	25
7.	AIDS cannot be transmitted through? Eat with people with HIV	29	55.8	23	44.2	37	71.2	15	28.8	23	44.2	29	55.8	36	30.8	16	69.2
8.	Which of the following are symptoms of an acute HIV/AIDS infection? Flu-like symptoms, fever, rash	28	53.8	24	46.2	40	76.9	12	23.1	27	51.9	25	48.1	40	76.9	12	23.1

Intervention 1		Intervention 2															
		Pre-test (n)				Post-Test (n)				Pre-test (n)				Post-Test (n)			
No	Item Knowledge question	Correct	%	False	%	Correct	%	False	%	Correct	%	False	%	Correct	%	False	%
9.	What are the symptoms of AIDS? Weight loss <10% in one month	24	46.2	28	53.8	40	76.9	12	23.1	24	46.2	28	53.8	35	67.3	17	32.7
10.	Can HIV disease be cured? Not	36	69.2	16	30.8	47	90.4	5	9.6	36	69.2	16	30.8	47	90.4	5	9.6

Source primary data 2017

Based on table 1 obtained the results of labors knowledge about HIV/AIDS before it is given education with IEC method, that the majority of Labors having knowledge with less category or appropriate for an answer given associated with HIV/AIDS especially on the question about the cause of HIV (51,9 %), how contagion (55,8 %), incubation period (55,8 %) and symptomatic of AIDS (53,8 %). While for labors knowledge about HIV/AIDS after being given education with a IEC method has increased, where most Labors have been aware of information about HIV/AIDS, where the highest percentage of wrong answer is question about the incubation period and transmission of AIDS could be by eating together with 28.8 percent respectively.

Table 1 also shows the results of Labors knowledge about HIV/AIDS before it was given a screening method is still very low , where the percentage of correct answers is the definition of HIV (86.5%) and the mode of transmission (69.2%). While for the results of knowledge about HIV/AIDS after being given education using the film screening method, most people experienced a fairly high increase in knowledge, except for knowledge about AIDS through eating together with AIDS patients (69.2%). As seen in table 1 below:

### Attitude

In table 2 shows that if laborsers prior to intervention still have negative attitude the highest percentage in the attitude of about the use of a pillow or plate should not be touched namely 71.2 % . But after conducted IEC intervention the percentage answer negative of laborsers is still high in the use of cushions and plate that should not be touched with 73.1 %.

**TABLE 2.** Description of the results of the pre-test and post-test questions in the intervention groups 1 and 2 regarding workers' attitudes towards HIV/AIDS

Attitude	Pre-test (n)								Post-Test (n)							
	Disagree		Less Agree		Agree		Strongly Agree		Disagree		Less Agree		Agree		Strongly Agree	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Intervention 1																
If there is a friend who is infected with HIV, it should be avoided and shunned	12	23.1	19	36.5	12	23.1	9	17.3	7	13.5	10	19.2	20	38.5	15	28.8
When helping an infected friend, you should use PPE (personal protective equipment)	-	-	5	9.6	34	65.4	13	25.0	-	-	5	9.6	19	36.5	28	53.8
HIV sufferers should immediately check and get treatment	12	23.1	6	11.5	29	55.8	5	9.6	1	1.9	3	5.8	42	80.8	6	11.5
Pillows or plates used by people with HIV/AIDS should not be touched	-	-	3	5.8	37	71.2	12	23.1	-	-	5	9.6	38	73.1	9	17.3

Attitude	Pre-test (n)								Post-Test (n)							
	Disagree		Less Agree		Agree		Strongly Agree		Disagree		Less Agree		Agree		Strongly Agree	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Faithful to one partner	-	-	10	19.2	37	71.2	5	9.6	-	-	-	-	47	90.4	5	9.6
Management has the right to unilaterally lay off a worker infected with HIV	5	9.6	5	9.6	20	38.5	22	42.3	5	9.6	5	9.6	17	32.7	25	48.1
HIV/AIDS is a disease that is considered shameful and deadly	10	19.2	19	36.5	12	23.1	11	21.2	3	5.8	12	23.1	10	19.2	27	51.9
Consultation on HIV/AIDS should be provided through the media and magazines	8	15.4	22	42.3	20	38.5	2	3.8	2	3.8	13	25.0	32	61.5	5	9.6
Use of condoms can avoid the risk of getting infected with HIV	19	36.5	8	15.4	18	34.6	7	13.5	-	-	1	1.9	36	69.2	15	28.8
HIV/AIDS sufferers have no right to live	17	32.7	12	23.1	14	26.9	9	17.3	18	34.6	21	40.4	8	15.4	5	9.6
<b>Intervention 2</b>																
If there is a friend who is infected with HIV, it should be avoided and shunned	7	13.5	10	19.2	20	38.5	15	28.8	7	13.5	10	19.2	20	38.5	15	28.8
When helping an infected friend, you should use PPE (personal protective equipment)	-	-	5	9.6	18	34.6	29	55.8	-	-	5	9.6	18	34.6	29	55.8
HIV sufferers should immediately check and get treatment	14	26.9	6	11.5	27	51.9	5	9.6	3	5.8	2	3.8	40	76.9	7	13.5
Pillows or plates used by people with HIV/AIDS should not be touched	-	-	5	9.6	38	73.1	9	17.3	-	-	5	9.6	38	73.1	9	17.3
Faithful to one partner	-	-	14	26.9	34	65.4	4	7.7	-	-	-	-	47	90.4	5	9.6
Management has the right to unilaterally lay off a worker infected with HIV	5	9.6	5	9.6	14	26.9	28	53.8	5	9.6	5	9.6	16	30.8	26	50
HIV/AIDS is a disease that is considered shameful and deadly	5	9.6	16	30.5	13	25	18	34.6	2	3.8	13	25	11	21.2	26	50
Consultation on HIV/AIDS should be provided through the media and magazines	2	3.8	19	36.5	30	57.7	1	1.9	2	3.8	13	25	32	61.5	5	9.6
Use of condoms can avoid the risk of getting infected with HIV	10	19.2	6	11.5	22	42.3	14	26.9	-	-	2	3.8	35	67.3	15	28.8
HIV/AIDS sufferers have no right to live	14	26.9	15	28.8	12	23.1	11	21.2	18	34.6	20	38.5	9	17.3	5	9.6

### Source primary data 2017

On the screening intervention group, labors attitude before intervention there were still many negative attitudes, especially on the question "The pillow or plate used by HIV/AIDS sufferers should not be touched", which was 73.1%. Meanwhile, after intervention of the screening, it was found that there were still many labors who had negative attitudes or agreed about the question "If there is a friend who is infected with HIV, it should be avoided and shunned", namely 38.5% and 28.8% strongly agree.

### Normality Test for Intervention Group 1 and 2

**Table 3.** Analysis of Normality Test in the Intervention Group 1 and 2

Score	Shapiro-Wilk		
	Statistic	df	Sig.
<b>Intervention Group 1</b>			

Pre-test knowledge	0.909	52	0.001
Post-test of knowledge	0.709	52	0.000
Pre-test attitudes	0.976	52	0.379
Post-test attitude	0.929	52	0.004
<b>Intervention Group 2</b>			
Pre-test knowledge	0.902	52	0.000
Post-test of knowledge	0.704	52	0.000
Pre-test attitudes	0.947	52	0.021
Post-test attitude	0.854	52	0.000

Source primary data 2017

Based on table 3, the pre-test statistical test for the knowledge of the sig value. 0.000 and the pre-test attitude value sig. 0.021 which means there is no significant difference between knowledge and attitudes. While, the post-test knowledge is  $p = 0.000$  and the post-test attitude value is  $p = 0.000$ , which means that there is no difference knowledge and attitudes of Labors in the intervention group 2.

The results of the analysis of the normality test in the intervention group 1 stated that the data were distributed abnormally, while the intervention group 2 stated that the data were not distributed abnormally, so the further analysis used Wilcoxon test.

#### ***Analysis of the mean pre-test and post-test scores of the Intervention groups 1 and 2***

Table 4. In the intervention group 1, the knowledge aspect showing sig. 0.000, which means there is a difference in knowledge before and after the IEC intervention. While on the attitude aspect, sig. 0.000 which means there is a difference in attitude before and after the IEC intervention. In addition, in the film screening intervention group, aspects of knowledge and attitude each have a sig value. 0.000, which means there are differences in knowledge and attitudes before and after the intervention of the film screening.

**Table 4.** Analysis of the mean pre-test and post-test scores in the intervention groups 1 and 2

<b>Intervention Group 1</b>	<b>Good</b>	<b>%</b>	<b>Less</b>	<b>%</b>	<b>Sig</b>
Pre-test knowledge	29	55.8	23	44.2	0.000
Post-test of knowledge	46	88.5	6	11.5	
Pre-test attitudes	45	86.5	7	13.5	0.000
Post-test attitude	52	100	-	-	
<b>Intervention Group 2</b>	<b>Good</b>	<b>%</b>	<b>Less</b>	<b>%</b>	<b>Sig</b>
Pre-test knowledge	40	76.9	12	23.1	0.000
Post-test of knowledge	46	88.5	6	11.5	
Pre-test attitudes	52	100	-	-	0.000
Post-test attitude	52	100	-	-	

Source primary data 2017

#### ***Analysis of mean change scores between intervention groups 1 and 2***

**Table 5.** Analysis of the mean change in the intervention groups 1 and 2 using the Wilcoxon test

<b>Variable</b>	<b>Intervention 1</b>		<b>Intervention2</b>	
	<b>n</b>	<b>p</b>	<b>n</b>	<b>p</b>
<b>Knowledge</b>		0.000		0.000

Decreased	0		0	
Increase	52		52	
Stay	0		0	
<b>Attitude</b>				
Decreased	2	0.000	5	0.000
Increase	41		32	
Stay	9		15	

Source primary data 2017

Table 5 show the analysis of changes in the pre-test and post-test knowledge in the highest IEC intervention group, namely respondents who experienced an increase of 52 respondents with a sig value. 0.000, means that any impact of HIV/AIDS prevention programs on project Labors knowledge using the IEC method and the highest change in pre-test and post-test knowledge in the intervention group 2, namely the group that experienced an increase of 52 respondents with a sig value. 0.000 means that any impact effect of HIV/AIDS prevention programs on the knowledge of project Labors by using film screening methods.

While change in attitude on pre-test/post-test in the highest intervention group, namely the respondents reported increased of 41 respondents with a sig value. 0.000, meaning that any impact of HIV/AIDS prevention programs on labors attitudes using the IEC method, while change in attitude on the highest the intervention group in the pre-test and post-test were respondents who experienced an increase of 32 respondents with a sig value. 0.000, meaning that any impact of HIV/AIDS prevention programs on labors attitudes by using film screening methods.

## Discussion

Knowledge is the basic humans for behave and act. Someone knowledge usually obtained from direct experience and information. Experience can made form of seeing, hearing, thinking, feeling, and doing activities with others. Every human being has all these different level of knowledge and to measure this by an interview using a questionnaire to ask the respondent.

The results interpretation of the impact of the HIV/AIDS prevention program using the IEC method, respondents with good knowledge were 46 (88.5%) and 6 (11.5%) less well. However results statistical tests indicated that any impact of HIV/AIDS prevention program using the IEC method on the knowledge labors of the Faculty of Engineering, Hasanuddin University construction project ( $p = 0.000$ ).

This research in line with Rizqy Amelia research, R Topan Aditya Rahman and Wenny Widaditria (2016) shows that any impact of reproductive health education on adolescent knowledge and attitudes about HIV/AIDS prevention (ABCDE) in Class XI SMK Negeri 3 Banjarmasin. Evidenced by the p value of  $0.000 \leq \alpha 0.05$  and the value of Exp (B) of knowledge of 8.370 and the value of Exp (B) of attitude of 2.773.<sup>20</sup> Research by Widarma Gde Hendra, Sri Hayati and Maidartati (2017) shows a change in knowledge before and after counseling interventions. Likewise, research by Lian Agustina Setiyaningsih (2017) proves a significant relationship between media exposure to HIV/AIDS IEC (leaflets and stickers) and the level of knowledge of female sex workers in Suko lokalisasi, Malang Regency. This study produces a positive correlation with a correlation coefficient (p) of +0.362 and a determination coefficient of 13.7%.<sup>21</sup>

Interpretation of HIV/AIDS prevention by screening films, respondents with good knowledge were 46 (88.5%), and 6 (11.5%) had poor knowledge. The statistical test result of  $p = 0.000$  shows any impact of HIV/AIDS prevention program by using film screening method.

These results are in line with the research of Winnie Shao, Wentao Guan, Melissa A Clark, Tao Liu, Claudia Santelices, Dharma E Cortes, Roland C Merchant in 2016 entitled Do Videos Increase Knowledge about HIV/AIDS and HIV Testing Among Global Internet Audiences? indicates a change in scores before and after watching videos related to HIV/AIDS.<sup>22</sup>

The results of this research are based on research conducted by Achmad Chairul Hamdi, Merry Wijaya and Shelly Iskandar (2016) that the IEC ABAT method is effective change perceptions, knowledge and prevention behavior, although it is not effectively changed stigmatization attitudes so it is suggested to redesign the IEC method based on the needs of the target group.<sup>23</sup>

Muflih (2017) researched the Effect of Gateway Short Message Service (SMS) Counseling on Self Efficacy in Avoiding Free Sex and Adolescent HIV/AIDS . The results of the analysis of the mean value of self-efficacy experienced a difference before and after counseling with a difference of 7% (before 90.7 and after 97.7). Muflih concluded that the SMS gateway significantly exert influence over the capacity self-efficacy in avoiding free sex and AIDS.<sup>24</sup>

Meanwhile, the interpretation from impact of the HIV/AIDS prevention program using the method of screening a film on the respondent's attitude, respondents with a positive attitude category were 52 (100%) people and respondents with a negative category were 0 (0%) people. The statistical test result of  $p = 0.000$  shows that there are impact of HIV/AIDS prevention program by using film screening method.

This research is in line with the research of Susi Milawati, Tavip Dwi Wahyuni, Fiashriel Lundy (2016) which shows that there any impact of developing PPE Video Media Learning with the use of Universal Precaution, based on the Chi-square test analysis  $p$  value = 0.000 ( $<0.05$ ) and there are statistically significant relations between the use of Universal Precaution with Attitude of Students,  $p$  value = 0.000.<sup>25</sup> Setyawati (2016) in her research shows the influence of health education on HIV/AIDS drama videos with a level of knowledge ( $P = 0.000$ ) and adolescent behavior ( $P = 0.016$ ) in HIV/AIDS prevention at SMA N 2 Boyolali.<sup>26</sup>

The research above is different than Maria Muliana's (2014) experimental study which resulted in the effect of HIV/AIDS prevention education on knowledge and attitudes in the experimental group which did not mean value of  $p = 0.000$ , likewise the control group had no effect.<sup>27</sup>

Based on the Mann-Whitney test, the results of this study obtained the value of  $p = 0.780$  which was greater than the value ( $<\alpha = 0.05$ ). From this analysis it can be interpreted ( $H_0$  is rejected and  $H_a$  is accepted) that there is no difference in knowledge of the IEC method and film screening.

While, in Noni Sulastri's research, Ririn Wahyu Hidayati (2017) shows that the use of powerpoint media and leaflets is more effective than just using leaflet media. The analysis results obtained that the  $p$ -value is 0.000 which is smaller than 0.05, so there is a difference between the experimental and control groups.<sup>28</sup>

While changes in knowledge using the video method can be seen in the research of Nazarwin Saputra (2017) showing the results of the study show a significant difference in knowledge between before and after HIV/AIDS health education towards groups of students who received HIV/AIDS interventions with health education interventions using the brainstorming method ( $p$  value = 0.0001). There was a significant difference in knowledge between before and after the



HIV/AIDS education intervention in the group of students who received the HIV/AIDS intervention using the health education lecture method using audio-visual media (p value = 0.0001). There was no difference in the effect of HIV/AIDS health education using the brainstorming method and audio-visual lectures on the knowledge of South Tangerang Senior High School 4 students (p value = 0.566).<sup>29</sup>

Interpretation of different attitudes of workers towards the IEC method and film screening. Respondents with the IEC method which indicates the presence of positiveness were 52 (100%) people and respondents with the film screening which indicates the presence a good influence on attitudes, namely 52 (100%) people. Based on the Mann-Whitney test, the calculated value of p = 0.614 was greater than the value ( $\alpha = 0.05$ ). From this analysis it can be interpreted ( $H_0$  is rejected and  $H_a$  is accepted) that there is no difference in attitudes towards the IEC method and film screening.

The influence of IEC on attitude formation is in accordance with the research of Tjan S (2014) which concluded that knowledge and attitudes about HIV were significantly related to the counseling undertaken, although counseling have no meaningful correlation with action.<sup>30</sup>

### **Conclusions**

Based on the results of research on the effect of HIV / AIDS prevention programs on the knowledge and attitudes of construction project workers at the Hasanuddin University Faculty of Engineering using the IEC method and film screenings, it can be concluded that the sig. in the pre-test knowledge, namely p = 0.001 and the pre-test attitude, namely p = 0.379, which means that there is a significant difference in knowledge and attitudes of workers before the IEC method. Meanwhile, the sig. in the pre-test knowledge, namely p = 0.000 and the sig value. In the pre-test, the attitude was p = 0.021, meaning that there was no significant difference between the knowledge and attitudes of workers before the screening method.

The sig value on the post-test of knowledge is p = 0.004 and the sig value. Post-test attitude, namely p = 0.000, meaning that there is no significant difference in knowledge and attitudes of workers after the IEC method. While the sig value on the post-test knowledge was p = 0.000 and the post-test sig value for attitude was p = 0.000, which means that there was no significant difference between the knowledge and attitudes of workers before the film screening method.

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