



The Differences Effect of Health Education between Movie and Lecture on mother's intention and participation on Visual Inspection Acetic Acid Test (VIA Test) in Karawang District

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Abstract.

Background : The Visual Inspection with Acetic Acid (VIA) test is a practical and cheaper way to prevent cervical cancer. One way to influence intention and participation in VIA test is health education based on the movie and lecture. The purpose of this study was to determine the difference effect of health education between movie and lecture on mother's intention and participation on VIA test.

Methods : The study design was quasi eksperiment. The sampling technique was consecutive sampling technique on 120 respondents. The data analysis employed bivariable analysis with chi-square, Fisher Exact Test, Mann Whitney and T-Test.

Results : This study showed there was a significant difference effect of the health education between the movie and lecture on the intention and participation ($P < 0.05$). There was increase intention in movie group (196,89%) than lecture group (127,96%). There was increase participation in movie group (60%) than lecture group (38%).

Conclusion : This study suggests that health education based on the movie can be used as a method health promotion program on early detection of cervical

Introduction

Cervical cancer is a malignancy that leads to death. Often caused by HPV (Human Papilloma Virus). According to the International Agency For Research On Cancer (IARC) in 2012, cervical cancer is the third type of cancer with the world's highest incidence of all cancers. Among women is about 7.9%, and who died of cervical cancer is approximately 7.5%.⁽¹⁾ 90% incidence of cervical cancer occur in developing countries. Indonesia is a developing country with the number of cervical cancer the sixth Reviews largest in Asia estimated that the incidence of this disease is about 17 per 100,000 inhabitants.⁽²⁾

The high number of deaths from cervical cancer in Indonesia is because 95% of women do not undergo early, causing delays in the diagnosis of cervical cancer and decrease the life expectancy of women. Based on the results of the study the probability of 5-year survival of Patients with stage 1 cervical cancer is approximately 70%, approximately 37.4% stage II, 12.4% stage III and

stage IV in the second year has become 0%.⁽³⁾ The incidence of cervical cancer can be prevented with early detection of precancerous lesions. Early detection of precancerous lesions can prevent precancerous lesions do not progress to cervical cancer if immediate treatment. This is evident in the developed countries that have experienced a decline in the incidence of cervical cancer. For example in the US, in the last 50 years the incidence of cervical cancer fell by about 70% are possible because of the early detection and management program that is good. The early detection of precancerous lesions can reduce the incidence of cervical cancer and reduce mortality by the caused by cervical cancer. One of the early detection of precancerous lesions among others through Visual Inspection Acetic Acid Test.⁽⁴⁾

VIA test is a method for cervical cancer screening using a 3-5% solution of acetic acid on the cervix and see the color change that occurs after a smear aimed to look at the cells of the

cervix roomates had dysplasia , Visual inspection method is Easier, simpler, and more capable like. This method can be done at all levels of health services, by trained health workers, Including midwives⁽³⁾ Research shows that VIA test has a sensitivity and specificity that is high enough to be used as a method of screening for precancerous lesions.⁽³⁾

In the known public health education media education in between movies. The movie is an audiovisual media are very effective because The movie characteristics can present moving images in addition to the Accompanying sound roomates can Affect a person's attitude.⁽⁵⁾ Research shows the results that the provision of health education through audiovisual media can influence attitudes towards health program.⁽⁶⁾

Based on the background of the study Researchers interested in studying about the positive effects of health education through the movie to intention and participation of VIA Test.

Methods

This research was conducted in in Karawang District. Approximate sample size in this study was calculated based on a large sample formula unpaired categorical analysis:

$$n_1 = n_2 = \frac{(Z\alpha\sqrt{2PQ} + Z\beta\sqrt{P_1Q_1 + P_2Q_2})^2}{(P_1 - P_2)^2}$$

The minimum sample size for movie group is 53 and sample size for lecture group is 53. In this study sample size was increased to 60 people for each group. This research is a quasi experimental. The design of this study using pre and post test with control group design. Measurements were taken before and after study in two groups.

Instruments in this study were questionnaire and movies. The movie used in this study is a movie that contains stories and animated.

In this study, The analysis of data employed univariate analysis to describe the variable characteristics. Statistical measures that will be used in this study is the frequency distribution and proportion of each variable studied. Intentions of respondents was measured by a score of intention which had transformation to an interval scale based on the 100 formula scale. Bivariate analysis to test respondents' intentions equality before experiment was T test if data have normal distribution and the Mann Whitney test if the data have normal distribution. The analysis data to examine the difference effect of movie and lecture was Mann-Whitney test because the data distribution was not normal. The bivariate analysis to examine the difference effect of the movie and lecture was Chi-Square test. The data processing using SPSS Version 12.

Results and Discussion

Table 1

The Differences Effect of Health Education between Movie and Lecture on Mother's Intention and Participation on Visual Inspection Acetic Acid Test (VIA Test) (n=120)

Variable	Group		P Value
	Movie Lecture		
	n=60	n=60	
1. Intention Before eksperiment			
- X (SD)	27,08(15,5)	28,33(14,89)	0,663**
- Median	25	25	
- Range	0-50	0-50	
After eksperiment			
- X (SD)	80,4 (30,9)	64,58(30,63)	0,002**
- Median	100	50	
- Range	0-100	0-100	
2. Participation Before eksperiment			
Follow	60(100%)	60(100%)	-
No Follow	0(0%)	0(0%)	
After eksperiment			
Follow	24(40%)	37(62%)	0,018***
No Follow	36(60%)	23(38%)	

*T Test** Mann Whitney Test ***Chi –Square Test

This result of research can be seen that before treatment, the intention of the respondent before the movie shows homogeneous data as shown in Table 1, that is the median value in the group of movie and lecture group was 25 with a range of 0-50. Statistical test results show the value $P = 0.663$ ($P > 0.05$) so that it can be assumed that there are no differences in the intention of the respondents in both groups before the movie and worthy to be compared. The participation of the respondent in the VIA test before treatment showed a homogenous data on which the two groups of 100% had never participated in VIA Test so there is no difference in the respondent's participation in VIA Test so worthy to be compared. Based on table 1, a score intention of respondents to the movie group was higher than lecture group after the movie is the movie group, the average intention was 80.4 with a range of 0-100 while in lecture groups, the average intention is 64.58. The test results showed statistically significant difference between the movie and lecture groups $P = 0.002$ ($P < 0.05$). Based on table 1, the proportion of participation of VIA Test group movie higher compared lecture after administration of health education which is 36 respondents (60%) in the

group of movie participated in VIA Test, whereas in the group lecture only 23 respondents (38%) who participated in VIA Test, The test results showed statistically significant correlation on the participation of VIA Test between the movie and lecture group with $P = 0.018$ ($P < 0.05$). Therefore it can be assumed that the health education through the movie affect the participation of VIA Test.

Tabel. 2
The Enhancement Differences of Health Education between Movie and Lecture on Mother's Intention and Participation on Visual Inspection Acetic Acid Test (n=120)

Group	X(SD)	Range	Enhancement (%)
1. Intention			
Movie Group			
Before	27,08 (15,5)	0-50	196,89%*
After	80,40(30,9)	0-100	
Lecture Group			
Before	28,33(14,89)	0-50	127,96%
After	64,58(30,63)	0-100	
2. Participation			
Movie Group			
Before	0(0%)		60%
After	36(60%)		
Lecture Group			
Before	0(0%)		38%
After	23(38%)		

*% Enhancement = $\frac{100 \times \text{posttest-pretest}}{\text{Pretest}}$

Based on Table 2, there was Increased percent higher intentions movie group (196.89%) than the group lecture (127.96%). Increased participation in the movie group was also higher (60%) than the group lecture (38%).

Audiovisual media is an effective medium for audiovisual media can provide clear information through pictures and sound. This is consistent with the theory that movie as an audiovisual media allows audio signals can be combined with the moving pictures. Movie can facilitate receipt of information. retention rate (absorption and memory) learners towards learning material can be increased significantly if the process of acquiring information through the senses of hearing and sight (visualization). According to the study, most sensory channel knowledge into the brain are the eyes. Approximately 75% to 87% of human knowledge is obtained through the eyes. Approximately 13% to 25% of the knowledge acquired through other senses. Information is the first condition for an intention. When informed that arise positive or negative feelings towards the object and cause a certain tendency to behave then

there attitude and intention⁽⁷⁾

Intention to undergo or not undergo certain behaviors (intention behavior) is influenced by two basic determinants, namely the first relates to attitudes (attitude toward behavior) and the other relates to social influences namely subjective norms. Attitudes derived from beliefs about behavior (behavioral beliefs) and one's evaluation of the consequences that will be borne (evaluations of behavioral outcomes).⁽¹⁸⁾ Providing health education through film through DVD can make the stimulus provided can be watched repeatedly. Events and events that occur repeatedly will be absorbed by the individual and affect the attitude of the mother, namely affecting the mother's belief in the IVA test (behavioral beliefs) and the mother's evaluation of the risks that will be borne from the IVA test (evaluations of behavioral outcomes) that ultimately can affect the mother's intention to do the IVA test⁽⁸⁾

In this study, films were presented on DVD (Digital Versatile Disc) format so that researchers could give the DVD to each respondent in the treatment group, which eventually made it easier for respondents in the group to be given health education through films to watch it independently. According to research, the principle of independent learning through audiovisual media will provide the opportunity for respondents to develop their understanding of information and ultimately can influence one's judgment of the information provided.⁽⁹⁾

Giving DVDs to respondents allows films to be watched with their families in their homes. This can increase the stimulus given to respondents and can influence respondents 'subjective attitudes and norms because of the social influence of their families and finally the respondents' intentions are higher. the provision of health education can improve attitudes, subjective norms and ultimately can increase one's intention to behave.⁽¹⁰⁾

Film can provide a stimulus that will be perceived by the audience. People who receive messages from mass media such as films tend to experience a process of conative change, namely the tendency of someone to do something after getting information from the media.⁴⁹ These results are consistent with research that states that giving intervention through audiovisual media can increase public awareness to undergo IVA test ($P < 0.05$).⁽¹¹⁾

Conclusion

This study showed a difference between health education using movie and lecture. Health education through the movie further increase intention of the mother and the mother's participation in VIA Test than lecture.

Competing Interest

The authors of this paper have no competing interest to report.

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Theory of Planned Behavior. Asian Pacific Journal of Cancer Prevention.;13: 595-99.

11. Garcia.2009. Impact Of An Educational Video-Based Strategy On The Behavior Process Associated With Colorectal Cancer Screening : a Randomized Controlled Study.

References

1. IARC. Globocan 2012. Estimated Cancer Incidence, Mortality and Prevalence Worldwide in 2012.WHO, (downloadable dated February 12, 2014). Available from http://globocan.iarc.fr/Pages/fact_sheets_population.
2. Ngan, Y.S.H. 2011. Asia Oceania Guidelines For The Implementation Of Program for Cervical Cancer Prevention and Control. Journal of Cancer Epidemiology.1 (1): 1-24
3. Gayatri, D.B; Nurachmah, E. 2005. Opportunities 5-year survival in cervical cancer patients, Dr Cipto Mangunkusumo and RS. Cancer Dharmais Jakarta. Indonesia Nursing Journal, 7 (1): 1-5.
4. Peirson, L; Donna; Warren, C. 2013. Screening For Cervical Cancer: A Systematic Review and Meta-Analysis. Biomed Central Journal, of 2 (13): 1-14.
5. Nurseto.2011. Creating Compelling Learning Media. Journal of Economics and Pendidikan, 8 (1): 19-34.
6. Poureslami, I; Balka, E. 2007. Assessing the Effectiveness of Informational Video Clips on Iranian Immigrants' Attitudes Toward and Intention to Use the BC HealthGuide Program in the Greater Vancouver Area. Medscape General Medicine Journal, 9 (1): 1-12.
7. Notoatmodjo, S. 2007. Health Promotion and Behavioral Sciences. 1 editor. Jakarta: Rineka Copyright, 1-247.
8. Montano E. Daniel, Kasprzyk. Theory Of Reasoned Action. Dalam: Glanz Karen, Rimer K Barbara, Viswanath. Health Behavior and Health Education Theory Reserch and Practice. 4, editor. San Francisco: Jossey-Bass; 2008. hlm. 68-80.
9. Saguni F. 2006. Prinsip-prinsip Kognitif Pembelajaran Multimedia: Peran Modality dan Contiguity Terhadap Peningkatan Hasil Belajar. Insan.;8(3):147-57.
10. Baghianimoghadam MH. 2012. Effect Of Education on Knowledge, Attitude and Behavioral Intention in Family Relative with Colorectal Cancer Patiens Based on