

The Effect of Health Education on Audio Visual with Visual on Early Detection of Cervical Cancer Through IVA Examination of Knowledge and Mother's Attitude at Hinai Kiri Puskesmas Kecamatan Secanggang Kabupaten Langkat in 2018

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Abstract

Cervical cancer is a malignant disease in cervix; it ranks the second as the cause of death in women throughout the world after breast cancer. The coverage of its early detection, using IVA method in Indonesia is 8.1% so that the case is found when it has already been in advanced stage. IVA (Visual Inspection with Acetic Acid) is a simple alternative method which is aimed to detect cervical cancer early as possible. The objective of the research was to find out the influence of audiovisual media health education with visual media about cervical cancer early detection through IVA screening on women's knowledge and attitude at Hinai Kiri Puskesmas. The research used quasi experimental method with without control group design. The samples were 24 married women who were 30-50 years old, taken by using purposive sampling technique. The data were analyzed by using bivariate analysis with paired t-test statistic test. The result of paired t-test showed that p-value = 0.000 ( $p < 0.05$ ) in the respondents' knowledge and attitude with the increase in the mean-score of the knowledge with audiovisual media was -16.75, visual media was -13.42, and the mean-score of attitude with audiovisual media was -18.83, visual media was -20..34. There was the influence of health education of audiovisual media with visual media on the respondents' knowledge and attitude toward cervical cancer early detection through IVA screening. It is recommended that health education technique be developed to increase people's awareness of cervical cancer, and cervical cancer screening facility be provided by using affordable IVA method.

Keywords: health education, cervical cancer, IVA screening, knowledge, attitude

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## Introduction

Cervical cancer or also called cervical cancer is a malignant disease that arises in the female reproductive organs precisely on the cervix or cervix. Cervical cancer is the most common type of cancer suffered by women after breast cancer and is a major health problem for women in the world, because the incidence and death rate reaches around 20 million sufferers per year and almost 90% of them occur in developing countries. The process of the appearance of cervical cancer actually requires a long time. To get to the occurrence of cervical cancer it takes 8-10 years since cervical cancer infection occurs and is likely to occur less than a year (Wahyuni, 2013).

Prevention efforts and early detection of cervical cancer are very important to be carried out periodically. In Indonesia, the high mortality rate due to cervical cancer needs to be observed so that there will not be a continuous increase in efforts to take preventive measures and early detection by health care workers, such as doctors, midwives and nurses. When found a woman with a diagnosis of cervical cancer at an early stage and the patient is getting immediate action and the right treatment, it will provide healing and a longer life expectancy to the sufferer (Ghazali, 2009).

In public health education, education media are known, including audio, visual and audiovisual media. Audiovisual media is very effective because it can present moving images in addition to the accompanying sound that can affect a person's attitude (Nurseto, 2011). As research conducted by Poureslami in 2007 showed the results of research that the provision of health education through audiovisual media can influence attitudes towards health programs. The media can represent what is not able to be said by the information provider, whether through certain words or sentences, even the abstractness of health promotion material can be concreted with the presence of the media.

Therefore, there needs to be an effort to increase the motivation of women to be more active in following the cervical cancer screening program. One of them is by providing information with health promotion or education about the dangers of cervical cancer and the importance of screening for women in an effort to early detect cervical cancer. Along with the vigorous promotion of cervical cancer health can provide good knowledge about cervical cancer and its problems, so it is expected that women can participate actively in participating in cervical cancer screening programs to avoid the disease.

## Methods

This research is a quantitative research using a quasi experiment design with pre post design without control group where the researcher gives treatment or intervention in the form of education through audiovisual media and visual media in the research subject. This design uses two groups of subjects and then each group is measured and analyzed before and after treatment.

The number of samples in the study amounted to each of 24 mothers who were married aged 30-50 years both in the audiovisual media group and in the visual media group. Characteristics of respondents in this study include age, education, economic / income level and affordability of maternal health services in Hinai Kiri Puskesmas, Kecamatan Secanggang, Kabupaten Langkat.

## Discussions

Based on the main activities at the Hinai Kiri Puskesmas in the promotion or health education efforts, the task is to carry out health education for the community at every opportunity by extension workers in clinics, homes and community groups concerning health by using print

media and electronic media in the form of leaflets, flip charts and videos accompanied by a lecture method in delivering health information. Health education can be done inside or outside the room. Health education or education activities are also held by coordination staff assisted by Puskesmas officials (Profiles of Hinai Kiri Puskesmas. Table 1. Characteristics of Respondents by Age, Level of Education, Economic Level / Income and Affordability of Health Service Places.

Characteristics of Respondents	Frekuensi	Persentase
1. Age		
Dewasa Muda (15-32 tahun)	13	27,08
Dewasa Tua (33-50 tahun)	35	72,92
Jumlah	48	100
2. Level of Education		
Pendidikan Tinggi (S1 dan D3)	5	10,42
Pendidikan Menengah (SMA)	22	45,83
Pendidikan Dasar (SMP dan SD)	21	43,75
Jumlah	48	100
3. Economic level/Income		
Diatas UMP (> Rp. 550.000,-)	10	20,83
Dibawah UMP (< Rp. 1.550.000,-)	38	79,17
Jumlah	48	100
4. Affordability of Health Service Places		
Terjangkau	40	83,33
Tidak Terjangkau	8	16,67
Jumlah	48	100

Table 2. Comparison of Pre-Test Results and Post-Test Knowledge and Attitudes of Mothers in Audiovisual Media Groups

Pre tes- Post tes	Audiovisual Media		t	P value
	Mean	Std. Deviasi		
1. Knowledge				
Pre Tes	52,08	10,990	-6,834	0,000
Post Test	68,83	5,514		
2. Attitudes				
Pre Tes	49,50	11,585	-7,489	0,000
Post Tes	68,33	5,880		

This shows that there are differences in scores on maternal knowledge about early detection of cancer serviks with IVA examination before and after health education / education with leaflet and flipchart media. This means that audiovisual media groups will provide higher knowledge than visual media groups. This is because mothers have less

response to listening to the material and storing the contents of the whole material, while more interested in seeing firsthand the information obtained through video media.

Table 3. Comparison of Maternal Pre-Test Results and Post-Test Knowledge and Attitudes in Visual Media Groups

Pre tes- Post tes	Visual Media		T	P value
	Mean	Std. Deviasi		
1. Knowledge				
Pre Tes	55,25	5,818	-8,049	0,000
Post Test	68,67	6,336		
2. Attitudes				
Pre Tes	49,58	11,762	-8,001	0,000
Post Tes	69,92	5,500		

Respondents had an attitude score on the audiovisual media group, namely the video media had a mean pre-test of 49.50% and in the post-test 68.33% (P value = 0,000). This shows a difference in maternal attitude scores about early detection of cervical cancer with IVA examination before and after health education / education with video media. Whereas in the visual media group the leaflet and flipchart media had a mean pre-test of 49.58% and 69.92% in the post-test (P value = 0,000). This means that the visual media group gives a better attitude compared to the audiovisual media group.

The results of this study support the research of Wahyuni (2013) in which behavioral attitudes are a reflection of someone's attitude that is made by man against himself, others or issues that are circulating, also a reaction of a person's response that is still covered by stimulus or object. If there is a negative response then the behavior will also tend to be negative and if the positive response then the behavior tends to be positive too.

Intervensi	Knowledge				Sikap			
	Mean	SD	t	P value	Mean	SD	t	P value
1. Audiovisual								
Pre Tes	-16,75	12,008	-6,834	0,000	-18,83	12,321	-7,489	0,000
Post Tes								
2. Visual								
Pre Tes	-13,42	8,166	-8,049	0,000	-20,34	12,450	-8,001	0,000
Post Tes								

Table 4 Recapitulation of Pre-Test and Post-Test of Knowledge and Attitudes of Respondents in Both Groups About Early Detection of Cervical Cancer about IVA Examination at the Hinai Kiri Puskesmas, Secanggang Kecamatan, Langkat Kabupaten, 2018

Many things have an effect on the success of the implementation of health education / education, including adequate facilities so that the implementation of health education can be carried out optimally. Besides that, different levels of community education are another factor that is very influential because of course they have different mindsets in dealing with this. Health education is a process that includes the dimensions and intellectual, psychological, and social activities needed to improve the ability of individuals to make decisions consciously and that affect the welfare of themselves, their families and society.

This process is based on the principles of science that provides convenience for learning and changing behavior, both for health workers and for service users. The limits of health education are basically planned efforts to change the behavior of individuals, groups, families and communities. It also shows that health education requires deep understanding, because it involves various terms or concepts such as change and the education process (Maulana, 2009).

The development of technology at this time is expected to be able to help or support the provision of health education in order to obtain optimal results to improve public health.

### Conclusion

Based on the results of the recapitulation of the pre-test and post-test scores on the group of audiovisual media with visual media on maternal attitudes about early detection of cervical cancer through IVA examination, it was found that there were significant influences of video and health education in improving the audiovisual media. Mother's attitude, as well as media groups using flipchart and leaflet there is a significant influence before and after health education / education. After comparing the mean or mean increase between the two groups, the visual media group was more effective in improving maternal attitudes about early detection of cervical cancer through IVA examination. This is because when conducting research before and after the intervention is given, leaflets can be taken home by the mother to read and re-learn, in contrast to videos that are only shown once and not taken home. So that the subject in the visual media group has a better attitude compared to the audiovisual media group.

### Suggestion

1. For the Government, especially the relevant Health Service is expected to be able to implement health education / education with audiovisual media and visual media in an effort to early detect cervical cancer through IVA examination, because it has been proven to be more effective in increasing knowledge and attitudes.
2. The Health Office and the Hinai Kiri Puskesmas need to provide early detection services for cervical cancer through an inexpensive IVA examination with the existence of a free program that is easily accessible to all people, especially for mothers aged 35 years or older by utilizing all available health facilities. In addition, it is necessary to develop health education / education techniques with audiovisual media and visual media using

videos, flipcharts and leaflets designed in such a way as to increase public awareness about cervical cancer.

3. For the development of science Further research on preventive efforts that are more effective and efficient to increase motivation for EFA to early detection of cervical cancer. In addition, it can examine and further examine the efforts of early detection of cervical cancer through IVA examination using other methods besides education / health education with the media. audiovisual and visual media. Health education / education should be done. more than twice and early detection of cervical cancer is done by IVA test examination.

## References

- Andrijono. 2009. *Kanker Serviks*. Edisi Kedua. Jakarta: Devisi Onkologi. Departemen Obstetri Ginekologi Fakultas Kedokteran Universitas Indonesia.
- Arikunto, S. 2013. *Statistika Untuk Penelitian*. Bandung: Alfabeta.
- Aziz, MF, Andrijono, Saifuddin, AB. 2010. *Onkologi Ginekologi: Buku Acuan Nasional*, Edisi 1, Cetakan Kedua: PT.Bina Pustaka Sarwono Prawirohardjo, Jakarta: Hal. 442-443.
- Budiman. 2015. *Pencanangan Gerakan Deteksi Dini Kanker Serviks*, artikel.
- Dahlan, S. 2009. *Besar Sampel dan Cara Pengambilan Sampel dalam Penelitian Kedokteran dan Kesehatan*. Jakarta: Salemba Medika.
- Dahlan, S. 2009. *Langkah-langkah Membuat Proposal Penelitian Bidang Kedokteran dan Kesehatan*. Seri 3 Edisi 2. Jakarta: Sagung Seto.
- Dewiwati, Tri Suci. 2013. *Determinan Ibu Dalam Deteksi Dini Inspeksi Visual Asam Asetat di Desa Karang Gading Kecamatan Secanggang Kabupaten Langkat*. Fakultas Ilmu Kesehatan Masyarakat Universitas Sari Mutiara Indonesia.
- Dewi. Ratna. L 2012. *Pengaruh Penyuluhan Terhadap Pengetahuan Tentang IVA Test, Dan Pap Smear Di Wilayah Kerja Puskesmas Mantengan Ngawi*. Naskah publikasi, Fakultas Kedokteran Universitas 11 Maret Surakarta.
- Dewi. Ratna. L 2014. *Pengaruh Penyuluhan Terhadap Tingkat Pengetahuan WUS Tentang Kanker Serviks, IVA Test, Dan Pap Smear Di Puskesmas Jetis*.
- Depkes RI. 2008. *Skrining Kanker Serviks dengan Metode IVA*. Jakarta
- Depkes RI. 2010. *Kepmenkes RI Nomor 796/Menkes/SK/VII/2010 tentang Pedoman Teknis Pengendalian Kanker Payudara dan Kanker Leher Rahim*. [www.hukor.depkes.go.id](http://www.hukor.depkes.go.id).
- Dinkes. 2017. *Profil Kesehatan Puskesmas Hinai Kiri Tahun 2017*.
- Ghazali F; Hanum; JHPIEGO. 2009. *Cervical Cancer Prevention Program with Visual Inspection with Acetat Acid (VIA) in Twelve Facilities in Karawang District*. *Indonesian Journal of Cancer*,3(3):91-5.
- Hadisaputro, Soeharyo. 2014. *Pengaruh Pendidikan Kesehatan Tentang Kanker Serviks Dan Metode Skrining Inspeksi Visual Asam Asetat ( IVA ) Terhadap Pengetahuan Dan Sikap PUS*. *Jurnal Kesehatan Ilmiah Nasuwake*. Vol. 7 No.2 Hal. 254–64.
- Kemenkes RI. 2014. *JKN Menjamin Pemeriksaan Deteksi Dini Kanker Leher Rahim dan*

- Payudara*. <http://www.depkes.go.id/article/print/2014270003/jkn-menjamin-pemeriksaan-deteksi-dini-kanker-leher-rahim-dan-payudara.html>.
- Kinanthi. E Linadi 2013. *Dukungan Suami Mendorong Keikutsertaan Pap Smear Pasangan Usia Subur (PUS) di Perumahan Pucang Gading Semarang*. Magister Promosi Kesehatan Universitas Diponegoro Semarang.
- Luszczynska, A. 2007. *Emotional Support for Men and Women with Cancer: Do Patient Receive What Their Partner Provide?*. International Journal of Behavioral Medicine. Vol. 14. No. 3 Hal. 156-163.
- Mahmudah, Ummul, Widya Hary Cahyati, and Anik Setyo Wahyuningsih. 2013. "Jurnal Kesehatan Masyarakat." *Jurnal Kesehatan Masyarakat* 8 (2): 113–20. <https://doi.org/ISSN1858-1196>.
- Mubarak. 2009. *Ilmu Kesehatan Masyarakat: Teori dan Aplikasi*. Jakarta: Penerbit Salemba Medika.
- Myrnawati, CH. 2017. *Metodologi Penelitian Untuk Pemula*. Tangerang Selatan: CV. Pustakapedia Indonesia.
- Norwitz, E.R. 2007. *At a glance Obstetri dan Ginekologi*. Alih Bahasa Artsiyanti. Jakarta: Penerbit Erlangga dan Pusan Perbukuan Depdiknas.
- Notoatmodjo, S, 2010. *Promosi Kesehatan Teori dan Aplikasi*. Jakarta: Rineka Cipta.
- Notoatmodjo, S, 2010. *Ilmu Perilaku Kesehatan*. Jakarta: Rineka Cipta.
- Notoatmodjo, S, 2014. *Metodologi Penelitian Kesehatan*. Jakarta: Rineka Cipta.
- Novel S. Sinta dkk. 2010. *Kanker Serviks dan Infeksi Human Pappiloma Virus (HPV)*. Jakarta : Javamedia Network.
- Nursalam. 2014. *Konsep dan Penerapan Metodologi Penelitian Ilmu Keperawatan*. Edisi 2. Jakarta: Penerbit Salemba Medika.
- Nurseto 2011. *Membuat Media Pembelajaran yang Menarik*. *Jurnal Ekonomi dan Pendidikan*, 8(13):1-14.
- Potter, P. 2009. *Fundamentals of Nursing*. Alih Bahasa: Adrina. Jakarta: Salemba Medika.
- Poureslami, I; Balka, E. 2007. *Assessing the Effectiveness of Informational Video Clips on Iranian Immigrants' Attitudes Toward and Intention to Use the BC Health Guide Program in the Greater Vancouver Area*. *Medscape General Medicine Journal*, 9 (1): 1-12.
- Purwono, Janu. 2017. *Efektivitas Penyuluhan Kesehatan Terhadap Pengetahuan Ibu Tentang Kanker Serviks*. *Jurnal Wacana Kesehatan*. Vol. 2 (1): 109–17.
- Rahayu, S.D. 2015. *Asuhan Ibu Dengan Kanker Serviks*. Jakarta : Salemba Medika.
- Rasjidi, I dan Henri S. 2007. *Vaksin Human Papilloma Virus dan Eradikasi Kanker Mulut Rahim*. Jakarta: Sagung Seto.
- Rasjidi, I. 2010. *Epidemiologi Kanker Pada Wanita*. Jakarta: Sagung Seto.
- Rasjidi, I. 2010. *Deteksi Dini dan Pencegahan Kanker pada Wanita*. Yogyakarta Nuha Medika.
- Sabella. F, 2019. *Cara Pintar Atasi Kanker*. Yogyakarta: Cable Book.
- Sabri, L. 2008. *Statistika Kesehatan*. Edisi Revisi. Jakarta: PT. Raja Grafindo Persada.
- Samadi, heru P. 2011. *Yes, I Know Everything About Kanker Serviks*. Solo: Metagraf.
- Savitri, Astrid. 2015. *Kupas Tuntas Kanker Payudara Leher Rahim Dan Rahim*. Yogyakarta:

Pustaka Baru Press Yogyakarta.

- Setiati, Eni. 2009. *Waspada 4 Kanker Ganas Pembunuh Wanita*. Yogyakarta: AndiOffset
- Supinto, Sutiono. 2008. *Cegah Dini Kanker dan Tumor*. Jakarta: Sunda Kelapa Pustaka
- Wahyuni, Sri. 2013. *Faktor-Faktor Yang Mempengaruhi Perilaku Deteksi Dini Kanker Serviks Di Kecamatan Ngampel Kabupaten Kendal Jawa Tengah*. *Jurnal Keperawatan Maternitas* 1 (1).
- Wall, K. M. 2010. *Modifiable Barriers to Cervical Cancer Screening Adherence Among Working Women in Mexico*. *Journal of Women's Health*. Vol.9. Number 7, Mary Ann Liebert. Inc.
- Winurungan, S. 2010. *Peranan Dukungan Sosial Terhadap Aktualisasi Diri Individu Lansia*. Universitas Tarumanegara Jakarta: Arkhe Th. 15 No. I. 2010. Hal. 66-80.
- World Health Organization, 2015. "A month to remember – Breast Cancer Awareness Month." <http://www.who.int/cancer/en/>.

