

# The Effect of Audio Visual Media Application on Women's Knowledge of Childbearing Age About Early Detection of Cervical Cancer in RW 03 West Pamulang Village South Tangerang City

Siti Novy Romlah<sup>1\*</sup>, Ikada Septi Arimurti<sup>2</sup>, Rita Dwi Pratiwi<sup>2</sup>,  
Ida Listiana<sup>2</sup>, Tukimin Bin Sansuwito<sup>3</sup>, Aggita Lutfiana<sup>3</sup>

<sup>1</sup>Department of Midwifery, Widya Dharma Husada Tangerang School and Health Science

<sup>2</sup>Department of Nursing, Widya Dharma Husada Tangerang School and Health Science

<sup>3</sup>Faculty of Nursing, Lincoln University College Malaysia

\*Corresponding author. Email: [sitinovyromlah@wdh.ac.id](mailto:sitinovyromlah@wdh.ac.id)

## ABSTRACT

Cervical cancer or cervical cancer is a malignant tumor that grows in the cervix/cervix. Every year no less than 15,000 cases of cervical cancer occur in Indonesia. Every day 40 women are diagnosed with cervical cancer, and 20 of them die from cervical cancer. The high mortality rate is due to delays in early detection. The purpose of this study was to determine whether there was an effect on the application of audio-visual media to the knowledge of women of childbearing age in early detection of cervical cancer. This type of research uses a quasi-experimental research method, which is a study that aims to determine the effect that arises. This study looks at the effect of the application of audio-visual media on the knowledge of women of childbearing age about early detection of cervical cancer. Using the Wilcoxon Signed Test analysis, it is known the Asymp value. Sig. (2-tailed) of 0.000 due to the asymp value. Sig (2-tailed) < 0.05 or 0.000 then according to the basis of decision making in the Wilcoxon Signed Ranks Test, it can be concluded that there is a significant difference, meaning that it can also be concluded that there is "The Effect of Audio Visual Media Application on Knowledge of Women of Childbearing Age in RW 03 Pamulang Barat Village, South Tangerang City". There is an influence on the application of audio-visual media to the knowledge of women of childbearing age in early detection of cervical cancer. The application of audio-visual media can be an alternative as a tool in health promotion or provide information to increase one's knowledge but further research is needed with more respondents.

**Keywords :** *Early Detection of Cervical Cancer, Audio visual Media*

## 1. INTRODUCTION

Cervical cancer, whose health term is cervical cancer, is cancer that occurs in the uterine cervix, an area of the female reproductive organs which is the entrance to the uterus which is located between the uterus and the vaginal opening (Purwoastuti and Walyani, 2015).

The main cause of cervical cancer is the Human Papilloma Virus (HPV) types 16 and 18. As many as 70% of cervical cancer cases in the world. The journey from HPV infection to cervical cancer takes a long time, which is about 10-20 years. However, the infection process is often not realized by the patient because it takes place without causing symptoms (Kartikawati, 2013).

In Indonesia, the prevalence of cancer is also very high. Based on data from the Basic

Health Research (Riskesmas), the prevalence of tumors/cancer in Indonesia is 1.4 per 1000 population, or about 330,000 people. The highest cancer in Indonesia in women is breast cancer and cervical cancer. The incidence of cervical cancer in Indonesia is 17 per 100,000 women. Based on the estimated number of cervical cancer sufferers in Indonesia in 2013, it is known that the provinces of East Java, Central Java and West Java have the largest estimated number of cervical cancer sufferers, while Gorontalo and West Papua provinces have the smallest estimated number of sufferers from all provinces. The incidence of cervical cancer in 2013 in Banten was 0.4% or around 2,252 people (Riskesmas, 2015).

Based on data from The Ministry of Health as of January 31, 2019, the incidence of cervical

cancer was 23.4 per 100,000 population with an average death rate of 13.9 per 100,000 population, meaning that almost 50% of cervical cancer sufferers ended in death. Limited access to accurate information is one of the causes of the high cases of cervical cancer in Indonesia. Another cause is the lack of awareness to carry out early detection (Ministry Health of Indonesia, 2019).

The high mortality rate of cervical cancer patients is mainly due to delays in early detection. Most patients come for treatment when their health condition is critical or at an advanced stage. Cases of cervical cancer found at an early stage are only about 5% (Nadji, 2016).

According to Astrid in Sri Melati's research, 2018. The incidence of cervical cancer can actually be suppressed by carrying out primary prevention efforts such as increasing outreach activities to the community to run a healthy lifestyle, avoiding the risk of getting cancer, immunizing with the HPV vaccine and followed by early detection of cervical cancer through IVA examination (Visual Inspection using Acetic Acid). Where this method is very suitable to be applied in developing countries because in addition to being cheap, easy, effective, good sensitivity and specificity, it can be carried out directly by midwives or Puskesmas officers and the results can be immediately known. So cervical cancer can be recognized at the pre-cancerous stage.

Based on the results of a preliminary study that I conducted at RW 03 Pamulang Barat Village, South Tangerang City, by direct interviews with 10 women of childbearing age, only 3 out of 10 women of childbearing age knew about Early Detection of Cervical Cancer. This is due to various factors, one of which is the lack of knowledge about Cervical Cancer and Early Detection of Cervical Cancer.

Ignorance or low knowledge of someone about cervical cancer and its prevention can cause cervical cancer not to be detected early. If a woman's knowledge about cervical cancer prevention is broad, it will lead to confidence in early detection of cervical cancer.

Therefore, it is still necessary to provide counseling or information to increase knowledge about early detection of cervical cancer and improve the attitude of women of childbearing age in responding to early detection of cervical cancer. One of the efforts to increase the willingness of women of childbearing age for VIA examination is to provide counseling or information about cervical cancer. This is reinforced by the results of research by Warni Fridayanti, et al. 2016. Those who argue that after being given counseling (post test) showed an increase in interest that occurred was the

result of cervical cancer counseling. Counseling can be done with various methods that are easily accepted by the community, one of which is by using media such as audiovisual. Audiovisual media is an effective media because this media can provide information clearly through images and sound. With the audiovisual media, the abstract concept of cervical cancer can become more real.

## **2. RESEARCH METHODS**

This type of research is an intervention research using a quasi-experimental research design. The experimental method is a research that aims to determine the effect that arises. In this study, the effect of the application of audiovisual media on the level of knowledge of women of childbearing age about early detection of cervical cancer. The data collected in the study were analyzed analytically using a computer software program. Bivariate analysis is an analysis used to explain the relationship between two variables between the independent variable and the dependent variable. The bivariate analysis in this study was to determine the effect of the application of audio-visual media on the knowledge of women of childbearing age about early detection of cervical cancer. Analysis using the Wilcoxon Test statistical test, with SPSS 25 software. The conclusion of the statistical test is obtained if the value of Sig. (2-tailed)  $< 0.05$ , then  $H_0$  is rejected and  $H_a$  is accepted, if the Sig value is obtained. (2-tailed)  $> 0.05$ , then  $H_0$  is accepted and  $H_a$  is rejected.

## **3. RESULTS**

### **3.1 Age**

Based on the results of the study, it showed that almost half of the respondents aged  $< 35$  years were 11 respondents (37%), and more than half of the respondents were  $> 36$  years old, namely 19 respondents (63%).

This is in accordance with Niken and Diah's research (2018), with the research title "The Effect of Cervical Cancer Health Education With Audio Visual Media on Motivation for IVA Test Examinations at WUS in Nglarang Lor Sidoarum Godean Sleman" the number of research samples used in this study was the most respondents. aged 41-45 years as many as 13 people (32.5%).

Based on the results of the researcher's analysis, it can be concluded that the majority of respondents are  $> 36$  years old or are in late adulthood. Age is one of the factors that affect a person's level of knowledge. Age affects a person's perception and mindset.

### 3.2 Education

Based on the results of the study, it shows that a small proportion of respondents with the last elementary education as many as 5 respondents (16.7%), almost half of the respondents with the last education of junior high school, namely 11 respondents (36.7%), then almost half of the respondents with the last education of Senior High School namely as many as 13 respondents (43.3%) and almost none of the respondents had a college education, namely 1 respondent (3.3%).

This is in accordance with Niken and Diah's research (2018), with the research title "The Influence of Cervical Cancer Health Education With Audio Visual Media on Motivation for IVA Test Examinations at WUS in Nglarang Lor Sidoarum Godean Sleman". the last education was high school as many as 20 people (50%).

Based on the researcher's analysis, it can be concluded that most of the respondents with the last education are SMA/SMK. The higher a person's education, the easier it is for that person to receive information. The more information entered, the more knowledge gained.

### 3.3 Occupation

Based on the results of the study, it shows that a small number of respondents work as entrepreneurs, namely as many as 6 respondents (20.0%), a small part works as traders, namely as many as 2 respondents (6.7%), then more than half become IRT as many as 17 respondents (56.7%) and a small proportion are still students or female students, as many as 5 respondents (16.7%). This is in accordance with Niken and Diah's research (2018), with the research title "The Effect of Cervical Cancer Health Education With Audio Visual Media on the Motivation of the IVA Test at WUS in Nglarang Lor Sidoarum Godean Sleman". as housewives as many as 27 people (67.5%). Based on the researcher's analysis, it can be concluded that most of the respondents are IRT. Work affects a person's knowledge, where if he works it will increase their knowledge of various scopes of work.

### 3.4 Knowledge Level of Women of Childbearing Age About Early Detection of Cervical Cancer Before the Application of Audio Visual Media in RW 03 Pamulang Barat Village, South Tangerang City

Based on the data obtained from the results of research using questionnaires, it was obtained that a small proportion of respondents had a low level of knowledge, namely 5 respondents (16.7%), almost all respondents had sufficient knowledge level, namely as many as 25

respondents (83.3%) and none a respondent gets a good level of knowledge, namely 0 respondents (0%).

From these data, it is revealed that this research is in accordance with previous research conducted by Niken and Diah (2018), with the research title "The Effect of Cervical Cancer Health Education With Audio Visual Media on Motivation for IVA Test Examinations at WUS in Nglarang Lor Sidoarum Godean Sleman" research on examination motivation VIA before being given cervical cancer health education with audio-visual media to women of childbearing age in Nglarang Lor, Sidoarum, Godean mostly in the medium category as many as 24 respondents (60%), while the least motivation is in the high category as many as 1 respondent (2, 5%).

The high level of knowledge about early detection of cervical cancer is influenced by internal factors, one of which is knowledge. Knowledge is an individual's ability to think and act in a directed manner so that people who have high knowledge will easily absorb information, suggestions and advice.

### 3.5 Knowledge Level of Women of Childbearing Age About Early Detection of Cervical Cancer After Giving Audio Visual Media In RW 03 Pamulang Barat Village, South Tangerang City

Based on the data obtained from the results of research using a questionnaire, the data obtained shows that there is no respondent who has a low level of knowledge (0%), a small proportion of respondents have a sufficient level of knowledge, as many as 2 respondents (6.7%) and almost all respondents get good level of knowledge as many as 28 respondents (93.3%).

From these data, it is revealed that this research is in accordance with previous research conducted by Niken and Diah (2018), with the research title "The Effect of Cervical Cancer Health Education With Audio Visual Media on Motivation for IVA Test Examinations at WUS in Nglarang Lor Sidoarum Godean Sleman" research on examination motivation VIA after being given cervical cancer health education with audio-visual media to women of childbearing age in Nglarang Lor, Sidoarum, Godean, the highest number was in the high category, namely 20 respondents (50%), while the least was in the low category, namely 1 respondent (2.5%).

Efforts that can be made to increase the knowledge of other respondents are by providing information, one of which is by providing health education. Health education used in this study uses audio-visual media, the use of media in

providing health education so that the results obtained are more effective. Through audio-visual media, the delivery of information can make learning more interesting and make it easier to understand the material presented.

#### 4. DISCUSSION

Analysis of the Effect of Audio Visual Media Application on Knowledge of Women of Childbearing Age in RW 03, Pamulang Barat Village, South Tangerang City. After the respondents were given the intervention of applying audio-visual media for 5 minutes and observing for 20 minutes, the results showed that almost all of the respondents had a good level of knowledge. Only a small number of respondents have sufficient level of knowledge. Before the intervention was given to the application of audio-visual media, not a respondent had a good level of knowledge, namely 0 respondents (0%) and when the intervention was given to the application of audio-visual media, almost all respondents had good knowledge, namely as many as 28 respondents (93.3%). These data indicate that there is a significant increase in knowledge of knowledge about early detection of cervical cancer.

The results of statistical tests using the Wilcoxon Signed Ranks Test obtained the Asymp results. Sig. (2-tailed) of 0.000 due to the asymp value. Sig (2-tailed) < 0.05 or 0.000 then according to the basis of decision making in the Wilcoxon Signed Ranks Test, it can be concluded that there is a significant difference, meaning that it can also be concluded that there is an Effect of Audio Visual Media Application on Knowledge of Women of Childbearing Age in RW 03 West Pamulang Village, South Tangerang City.

This study is in accordance with previous research conducted by Niken and Diah (2018), with the research title "The Effect of Cervical Cancer Health Education With Audio Visual Media on Motivation for IVA Test Examinations at WUS in Nglarang Lor Sidoarum Godean Sleman" the results of the analysis on statistical tests using Wilcoxon Signed Ranks Test results obtained p-value .000 ( $p < 0.05$ ) so that  $H_a$  is accepted and  $H_o$  is rejected. This means that there is an effect of providing cervical cancer health education with audio-visual media on the motivation of VIA examinations in women of childbearing age in Nglarang Lor Sidoarum Godean Sleman.

Through audio-visual media, the delivery of information can make learning more interesting and make it easier to understand the material presented.

#### AUTHORS' CONTRIBUTION

SNR was developed the proposal and literature review and also Interpreted the data. ISA and AL collected data from the respondenst. TDW and IL was analysis the data after finished to collected. TBS has review all of the study content.

#### ACKNOWLEDGMENTS

We will acknolodge Widya Dharma Husada Tangerang School and Health Science for support this study. And also for RW 03 West Pamulang as the place from this study.

#### REFERENCES

- [1] Arikunto, Suharsimi. 2012. Research Procedures A Practical Approach. Jakarta: Rineka Cipta.
- [2] Budiman, Riyanto. 2013. Capita Selecta Questionnaire. Jakarta: Salemba Medika.
- [3] Desby Juanda, Hadrians Kesuma. 2015. Examination Method IVA (Visual Inspection  
[4] *Acetic Acid) for Cervical Cancer Prevention.*
- [5] Donsu, JDT 2017. Nursing Research Methodology. Yogyakarta: New Press Library.
- [6] Eka. 2019. The Effect of Audio Visual Health Education on Breast Cancer Through Instagram Social Media on the Knowledge Level of Women of Childbearing Age.
- [7] Kartikawati Erni, 2013. The Dangers of Breast Cancer and Cervical Cancer. Bandung: New Book.
- [8] Indonesian Ministry of Health. 2011. Population Data Targets for Health Development Program 2011- 2014. Jakarta: Indonesian Ministry of Data and Information Center. [www.kemkes.go.id](http://www.kemkes.go.id)
- [9] Ministry of Health. 2015. Guidelines for the Management of Cervical Cancer. [http://kanker.kemkes.go.id/guidelines/PPK Serviks.pdf](http://kanker.kemkes.go.id/guidelines/PPK_Serviks.pdf)
- [10] Ministry of Health. 2019. <https://www.kemkes.go.id/article/view/19020100003/hari-kanker-sedunia-2019.html>
- [11] Lisyani Astri, 2019. The Effect of Health Education With Audio Visual Media Towards Knowledge of Women of Childbearing Age About Cervical Cancer in Sumowono Village.
- [12] Mahmud, 2011. Educational Research Methods. Bandung: Faithful Library

- [13] Masturoh Imas, Anggita Nauri. 2018. Health Research Methodology.
- [14] Melati Sri, 2018. The Relationship between Motivation and Wus Attitude With Early Detection of Cervical Cancer During IVA Examination at the Medan Johor Health Center, Medan Municipality in 2018.
- [15] M. Anggraini, et al. 2016. The Relationship Between Knowledge Level And Attitude Of Women Of Reproductive Age With Efforts To Do Early Detection Of Cervical Cancer At Girimaya Public Health Center Pangkal Pinang City.
- [16] Mulyati Sri. 2015. The Effect of Film Media on Mother's Attitude on Early Detection of Cervical Cancer.
- [17] Najdi A, 2016. Awareness of cervical cancer risk factors, screening practices and attitudes among nurses in a primary health care setting of Morocco: a cross sectional study. *Journal of cancer science and clinical oncology* Vol. 3 Issue 2 September 2016.
- [18] Niken, Diah. 2018. The Effect of Cervical Cancer Health Education with Audio Visual Media on the Motivation of the IVA Test at WUS in Nglarang Lor Sidoarum Godean Sleman.
- [19] Notoatmodjo. 2012. Health Promotion and Health Behavior. Jakarta: Rineka Cipta.
- [20] Notoatmodjo S. 2014. Behavioral Health Sciences. Jakarta: Rineka Cipta.
- [21] Prawirohardjo Sarwono. 2014. Sarwono Prawirohardjo Midwifery Science. Jakarta: PT. Bina Pustaka Sarwono Prawirohardjo
- [22] Purwoastuti, E., Walyani, E. 2015. Guidelines for Materials on Reproductive Health & Family planning. Yogyakarta: New Press Library.
- [23] Rasjidi Imam. 2009. Early Detection and Prevention of Cancer in Women. 130–132. Jakarta: CV Sugeng Seto. Rasjidi Imam. 2010. Early detection and prevention of cancer in women. 200. Jakarta: CV Sugeng Seto.
- [24] Riskesdas. 2015. Cancer Disease Situation Data and Information Center of the Ministry of Health. <https://pusdatin.kemkes.go.id/download.php?file=download/pusdatin/buletin/buletin-kanker.pdf>
- [25] Savitri, A. Larasati, A. Utami, R. 2015. Complete Peel of Breast, Neck & Uterus Cancer. New Press Library. Yogyakarta.
- [26] Sugiyono. 2012. Quantitative, Qualitative, and R&D Research Methods. Bandung: Alfabeta.
- [27] Wahidin Mugi. 2015. Early Detection of Cervical Cancer and Breast Cancer in Indonesia. <https://pusdatin.kemkes.go.id/download.php?file=download/pusdatin/buletin/buletin-kanker.pdf>
- [28] Zein Michael. 2020. *The Effectiveness of Counseling Using Audio Visual Media on the Knowledge Level of Women of Childbearing Age Regarding Cervical Cancer at the Tanjung Semayam Health Center, Sanggau Regency.*