



The Effect of Education about Cervical Cancer through Zoom Meetings on the Knowledge of Adolescent Girls in 1 Lumbung High School

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ABSTRACT

Cervical cancer ranks first after breast cancer in developing countries, one of which is in Indonesia. Cervical cancer is a sexually transmitted disease that starts with a viral infection, namely the human papilloma virus which stimulates changes in the behavior of cervical epithelial cells. The prevalence of women against cervical cancer is large due to the tendency of women to marry at a young age and limited economic capacity which makes access to information limited. Providing health education through zoom meetings considering the limitations due to the pandemic really needs to be done for adolescents as a preventive effort considering that adolescents are very vulnerable to having free sex. Objectives: The effect of education through zoom meetings on cervical cancer on the knowledge of adolescent girls in public high school 1 Lumbung in March 2022. The research used is quantitative research. Method: a tool for data collection using a questionnaire while sampling with total sampling technique with a sample size of 40 female students. Results: The results of data analysis using the t-test on the effect of education through zoom meetings on cervical cancer obtained a significant value because the value of $t_{count} > t_{table} = 15.627 > 2.023$ and the value of $\alpha > p \text{ value} = 0.05 > 0.000$. Conclusion: from the results of the study it can be concluded that there is a significant effect of health education between before being given health education and after being given health education.

INTRODUCTION

Cervical cancer ranks first after breast cancer in developing countries, one of which is in Indonesia. Cervical cancer is a sexually transmitted disease that starts with a viral infection, namely the human papilloma virus which stimulates changes in the behavior of cervical epithelial cells. Reproductive health problems faced by women at this time are increasing infections in the reproductive organs, ultimately causing cancer. Efforts that need to be made to prevent cervical cancer are by providing health education through online media, to increase adolescent girls' knowledge about cervical cancer (ona Adesta & Nua, 2021).

Cancer is an abnormal growth of a cell or tissue that grows and develops uncontrollably, the speed of growth is excessive, and eventually disrupts other organs. This cancer grows on the epithelium or outer layer of the surface of the uterus which is then called cervical cancer. This cancer is caused by the Human Papilloma Virus (HPV) virus. Cervical cancer is a very dangerous disease that is experienced by many women, precisely in the cervical region (Kurnaesih et al., 2018).

Cervical cancer is caused by the Human Papilloma Virus (HPV) which is transmitted through sexual intercourse or intimate relationships (marital sex) with men who often change partners at an early age or adolescence, namely age < 16 years, this can increase the risk of developing cervical cancer. Such as smoking habits, lack of nutritional intake, use of oral contraceptives for a long period of time,

sexual activity among adolescents and parity (number of births that are more or often) long (Kurnaesih et al., 2018)

The causes of cervical cancer in the world are lack of knowledge, delayed treatment or early screening which results in many victims dying, even though this cancer can be prevented in several ways, namely by doing PAP SMEAR and IVA will make it easier to find out the symptoms of cervical cancer (Siregar, 2019).

Cervical cancer management can be emphasized by making prevention efforts. Efforts that must be made by health workers in overcoming the increasing number of cancers are by conducting vigilance and early detection in adolescents to prevent cervical cancer in the future. Prevention of cervical cancer is needed to be able to change the behavior of adolescents in maintaining their reproductive health. Through prevention and detection as early as possible, it will increase the possibility of emphasizing the incidence of cervical cancer cases in women. The strategy in this prevention is to educate through health promotion or counseling (primary prevention) a healthy lifestyle that aims to learn to prevent disease and screening in the form of pap smears (secondary prevention) to reach viral infections (HPV) pap smear screening is able to detect early changes in the cervix before they develop into cancer cells can be cured immediately (Siswoaribowo et al., 2021).

According to the World Health Organization (WHO) Adolescence is a transitional period where physical and

psychological changes from childhood to adulthood. Psychological changes in adolescents include intellectual, emotional, and social life. Physical changes include sexual organs, namely the reproductive organs have reached maturity and are starting to function properly. The age limit for adolescents is 10-19 years (Purbosari et al., 2021).

Development in the adolescent age range occurs dynamically and rapidly both physically, psychologically, intellectually, socially, sexual behavior is associated with the onset of puberty. The characteristic pattern of this rapid growth and development causes adolescents to have a great sense of curiosity, love adventure and challenge and tend to take risks without careful consideration, the development of adolescent reproductive health problems, which involve free sex, the spread of venereal diseases, pregnancy outside marriage or unwanted pregnancy, abortion, and young marriage, these behaviors can have negative consequences. As many as 75% of deaths in adolescents occur due to behavioral factors. Some diseases that arise due to adolescent behavioral factors include accidents, teenage pregnancy, sexually transmitted diseases, eating disorders and drug and alcohol abuse (Siregar, 2019).

The rise of promiscuous sex in adolescents is a risk for cervical cancer. In adolescence the cervix of women is immature so it is vulnerable to stimulation and viral attacks. The female reproductive organs will be active and developing where the cells divide actively. At that time, there should not be any stimulation that will make changes in the nature of the cells become abnormal. The abnormal cells will cause

cervical cancer. The infection process can reach the next 5-10 years. Women affected by this virus do not immediately feel sick. But after many years they only feel pain, even though they have been infected for a long time.

According to WHO, data on cervical cancer patients continues to increase every year, more than 270,000 women die from cervical cancer, and more than 85% occur in developing countries. According to (riskesdas) in 2018, the prevalence of cancer in Indonesia reached 1.79 per 1000 population. In 2019 there was another increase to reach 569,647 cases, per 100,000 cases there were 29.9 new cases and the mortality was more than half. The high number of cervical cancer cases in Indonesia makes WHO place Indonesia as the country with the highest number of cancers in Indonesia. Data from the Indonesian cancer foundation in ciamis district there are 3 people who are famous for cervical cancer, including 1 teenager and an elderly person.

In Indonesia, there are an estimated 40,000 new cases of cervical cancer every year. According to pathology-based cancer data in 13 pathology laboratory centers, cervical cancer is the cancer that has the highest number of patients in Indonesia, which is approximately 36%. From the data of 17 hospitals in Jakarta in 1977, cervical cancer ranked first, namely 432 cases among 918 cancers in women. At Dr. Cipto Mangunkusumo Hospital, the frequency of cervical cancer was 76.2% among gynecological cancers. Most patients came at an advanced stage, namely stage IIB-IVB, as much as 66.4%. Cases with stage IIIB, which is the stage with impaired renal

function, were 37.3% or more than a third of cases.

The highest number of cervical cancer screenings was found in the provinces of West Java, Central Java, and East Java. The estimated number of cervical cancer patients in West Java province is quite a lot. The number of cervical cancer in West Java province is 15,635 As of 2013, there were 405 trainers in charge of providing training to early detection providers in each province in Indonesia. The trainers consisted of obstetrician gynecologists, oncology surgeons, oncology surgeons, general practitioners, and midwives. Of all the provinces in Indonesia, only Aceh Province does not have early detection trainers, while West Nusa Tenggara province has the most trainers, with 36 people. It is expected that the number of trainers will increase so that the number of providers and screenings will also increase (Ministry Data and Information Center 2015).

Most municipalities have an incidence rate of cervical cancer. Women show that the frequency of cervical cancer in each year appears and becomes a problem. Cervical cancer data in Ciamis Regency shows the incidence of cervical cancer with a frequency of 1.03%, including in the granary areas included in the scope of Ciamis Regency (Lelly, 2020).

Cervical cancer is still an important problem in developing countries. More than 80% of women with cervical cancer are diagnosed at an advanced stage due to poor access to health facilities, lack of awareness of cervical cancer, and means to screen, as well as the absence of treatment programs.

The peak age for cervical cancer is 47 years old, with about 10% occurring at 65 years old (Nita & Indrayani, 2020).

More than 30% of cancer deaths are caused by five behavioral and dietary risk factors, namely high body mass index, lack of fruit and vegetable consumption, lack of physical activity, cigarette and alcohol use. Other risk factors for cervical cancer are related to sexual activity at a young age (<16 years), sexual intercourse with multiple partners, suffering from HIV along with HPV and female smokers. Experts estimate that 40% of cancers can be prevented by reducing their risk factors. Problems found in patients with cervical cancer include coming to the health service after entering an advanced stage and already having metastases in other organs, this is because the early stages have not shown symptoms, and specific signs so that the patient does not realize that he is already famous for cervical cancer (Sukmawati et al., 2020).

The government's efforts in following up on the incidence of cervical cancer are by socializing to various elements of society about cervical cancer, especially to adolescent girls, which aims to recognize and educate the public regarding the dangers of the disease and how to prevent and treat it. The government also emphasizes that the community should conduct early screening to prevent cervical cancer.

Knowledge is a participant's understanding of a given topic. Knowledge is the ability to receive, retain, and use information influenced by experience and skills. Most of the knowledge a person has comes from

formal and informal reverse education, personal and other people's experiences, the environment, and mass media.

Health education can be carried out in various ways, namely both face-to-face (offline) and online (online). Health education in the network can be provided through online media such as YouTube, Facebook, Twitter, WhatsApp, Instagram, Zoom meetings and others. Online media integration is seen as an interactive process that allows the exchange of information at the same level between the audience and the messenger, creating feedback communication (ona Adesta & Nua, 2021).

One of the methods without face-to-face meetings is to use zoom meetings. Zoom meeting is an internet-based video conference that is used for informal discussions. This method is used to conduct counseling to adolescents which aims to provide information to adolescents to recognize cervical cancer.

According to research conducted by Ira Purbosari with the title "Efforts to Prevent the Increase in Cervical Cancer through Socialization of How to Prevent Cervical Cancer in Adolescents" This PPM activity was carried out by working with students of SMU Muhammadiyah 1 Taman Sidoarjo, totaling 58 students of class 12. The results of this research were an increase in the knowledge of paldal students of SMU Muhammadiyah 1 Taman Sidoarjo (Purbosari et al., 2021). The disadvantages and advantages of using online media are that we can present the material as much as possible and the disadvantages are that we cannot meet face to face and interact directly.

Based on a preliminary study conducted by researchers on November 16, 2021 on 15 students of class XII SMA Negeri 1 Lumbung, 5 out of 15 students knew about cervical cancer. However, 10 out of 15 female students do not know extensively about cervical cancer such as causes, treatment, prevention, risk factors that can trigger cervical cancer, even how to detect this disease early adolescent girls at SMA Negeri Lumbung do not know at all. This is due to the lack of information about cervical cancer.

Therefore, researchers are interested in taking the title "The Effect of Education through Zoom Meeting about Cervical Cancer on the Knowledge of Adolescent Girls at SMA1 Negeri 1 Lumbung". Because it is still in the midst of a pandemic, it is necessary to make changes in the distribution of information. So the author uses zoom meetings to make the counseling effective and minimize the occurrence of COVID-19 transmission. Not only in informal counseling, but zoom meetings can also be used in education, laboratories and other matters. In addition to conducting health counseling to increase knowledge about diseases, this hall is very effective in times of a pandemic like this.

METHOD

This research method uses experimental design using The One Group Pretest-Posttest Design. The population in this research is all female students in class XII of SMA Negeri 1 Lumbung as many as 40 people, consisting of 20 people in class XII Science and 20 people in class This sampling is non-probability with total sampling, namely the sampling method is

carried out by taking all members of the population as respondents or samples. This research was conducted at SMA Negeri 1 Lumbung on March 22 2022.

This research began with a preliminary survey to obtain the data needed for the research. Data taken from SMA Negeri 1 Lumbung and District Health Service. Look for various literature reviews to serve as references used in preparing research proposals.

Data collection was carried out in collaboration with the teaching staff at SMA Negeri 1 Lumbung. After the appropriate data has been collected, to make it easier to collect female respondents from class XII IPA and class XII IPS. Gathering in one place is at risk of spreading Covid, but the author emphasizes maintaining health protocols such as using masks, maintaining distance when indoors to minimize the spread of Covid-19. But beforehand respondents were asked for their willingness to participate in the research by signing informed consent.

After the pretest questionnaire has been completed by the respondent, the next stage is to provide treatment by providing education via zoom meetings regarding cervical cancer. The final stage is that respondents are asked to fill out a posttest questionnaire sheet in the form of the same questions but the numbering is random.

Data analysis in this research uses Univalrialt and Bivalrialt analysis which

uses the T-test to determine the partial significance of the role of the independent variable on the dependent variable by assuming that other independent variables are considered constant at SMA Negeri 1 Lumbung.

RESULTS AND DISCUSSION

Based on the results of research at SMA Negeri 1 Lumbung, the results of the study were obtained:

Univariate Analysis

Univariate analysis in this study describes the characteristics of respondents.

1. Characteristics of Respondents

Table 1.1 Frequency Distribution of Knowledge Values About Cervical Cancer of Adolescent Girls Before and After Education Through Zoom Meeting at SMA Negeri 1 Lumbung

No	Category	Pre Test		Post Test	
		F	%	F	%
1	Good	0	0	2	70.0
2	Enough	5	12.5	1	27.5
3	Not Enough	35	87.5	1	2.5
Total		40	100	4	100
				0	

Bivariate Analysis

1. Effect of Education Through Zoom Meeting

Table 1.2 Effect of Education through Zoom Meeting About Cervical Cancer on the Knowledge of Adolescent Girls at SMA Negeri 1 Lumbung

Variabel	Mean	Standard Deviation	Mean	t count	t table	p value
The effect of education through zoom meeting about cervical cancer on the cognition of female adolescents						
Before being given education through zoom meeting	0.842	1.947	1.550	15.627	2.023	0,000

Variabel	Mean	Standard Deviation	Mean	t count	t table	p value
After being given education through zoom meeting	14.95	2.241				

1. Knowledge of adolescent girls before being given education through zoom meetings

Based on the results of research on 40 female students, it was found that the knowledge of adolescent girls before being given education through zoom meetings was mostly in the poor category, namely 35 female students (87.5%). After being given education through zoom meetings, most of them are in the good category of 28 students (70.0%), it can be said that the understanding of female students at SMA Negeri 1 Lumbung has increased to good which was previously in the poor category.

2. Knowledge of adolescents after being given zoom meeting education about cervical cancer.

Based on the results of research on 40 students, it is known that the knowledge of adolescent girls at SMA Negeri 1 Lumbung after being given a health education zoom meeting recognizing cervical cancer, most of the students are in the good category, namely 28 students (70.0%). The increase in knowledge of adolescent girls about cervical cancer was obtained through zoom meeting education, besides that respondents were motivated to look for their own informal recognition of cervical cancer by searching the internet. This is in accordance with the theory that the purpose of educating is to change those who did not know to know.

3. The effect of education through zoom meeting about cervical cancer on the knowledge of adolescent girls at SMA Negeri 1 Lumbung.

Based on table 1.2, it shows that there is a difference or influence between the pre-test and post-test scores at SMAN 1

Lumbung with a tcount = 15.627 and ttable = 2.023 with a Sig (2-tailed) level of 0.000 < 0.05. Based on the results of the paired t-test, the sig value shows. 2-tailed) = 0.000 < α = 0.05. So it can be concluded that there is, or there is an effect of education through Zoom meetings about cervical cancer on the knowledge of adolescent girls at SMA Negeri 1 Lumbung.

This is evidenced that before health education most or 87.5% of respondents are known to have insufficient knowledge of cervical cancer. After receiving health education, most 70.0% of respondents are known to have good cervical cancer knowledge. There is a difference in the mean value of knowledge before health education is 0.842. While the average value after being given health education is 14.95. So it can be concluded that there is a significant effect on providing education to adolescent girls at SMA Negeri 1 Lumbung.

This research is also in line with research (Tsani & Kirnantoro, 2011) entitled "the effect of health education on cervical cancer on efforts to prevent cervical cancer in SMA Negeri 1 Sleman Yogyakarta students" with the results there is a significant effect, obtained the results of research before being given health education 6 students (14.7%) high 32 students (78%) moderate 3 students (7.3%) low, and after being given health education 16 students (39.0%) high, 23 students (56.1%) moderate, and 2 students (4.9%) low. There was an increase of 10 respondents (24.4%) with high prevention efforts, 9 respondents (22.2%) medium, and obtained respondents with low efforts 1 respondent (2.2%).

This research is also in line with Amalia Ratna Kusumaningrum's research which states that education about cervical cancer is very important, especially for high school girls who will later become their knowledge.

But in this study there are still some respondents whose knowledge is still lacking or in the insufficient category, this is due to several factors, namely. First, limited time in delivering the material is only done in one day. Second, the material was provided through a zoom meeting so that some participants were not too focused on the material provided. Third, depending on the internet network experienced by some participants, resulting in the material provided being less than maximally captured by participants. and after being given health education the respondents were in the good category.

One of the factors that affect a person's knowledge is the information factor, because lack of information can slow down the knowledge a person acquires

Providing health education is one of the ways to increase knowledge. Health education is a planned effort to influence, improve protection and assistance so that a person has the ability to behave as expected. The success and delivery of health education is influenced by several factors including learning needs, motivation to learn, ability to learn, learning environment, and learning facilities

1. Student perceptions of the final project in the S1 Nursing Study Program at STIKes Muhammadiyah Ciamis
The results showed that the perception of the final assignment in the S1 Nursing Study Program STIKes Muhammadiyah Ciamis, the highest frequency was in the positive category as many as 34 people

(54.8%). This is because the purpose of this final project is to get a nursing degree so that students have a positive perception in dealing with it, the attitude of values and beliefs of students also affects their perceptions, for example, students who are preparing a thesis will focus more on their thesis than on other things Based on the questionnaire statement stating that the thesis provides motivation, the majority of respondents answered agree (60%), the questionnaire statement stating that the thesis is important for the future, the majority of respondents answered agree (55%) and the questionnaire statement about being able to complete the thesis on time, the majority answered strongly agree (58%), This is in accordance with the theory put forward by Hidayat (2012) that perception is the process of a person understanding the environment, including organizing and interpreting stimuli in a psychological experience, the cognitive process of interpreting objects, symbols and people with relevant experiences, the process of extracting information in preparation for response. Perception receives, selects, organizes, stores and interprets stimuli into a complete and meaningful picture of the world. In line with the above theory Achamd (2012) states that beliefs and needs or motives are one of the factors that influence student perceptions. Motivation in learning activities is a force that can be a driving force for students to complete the tasks being done.

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of research with the title The Effect of Education through Zoom Meeting About Cervical Cancer on Adolescent Girls at SMAN 1 Lumbung which has been discussed in the previous chapters, it can be concluded:

1. Knowledge of adolescent girls at SMA Negeri 1 Lumbung before

being given zoom meeting education about cervical cancer is mostly included in the less category, namely as many as 35 students (87.5%).

2. Knowledge of adolescent girls at SMA Negeri 1 Lumbung after being given zoom meeting education about cervical cancer is mostly included in the good category, namely 28 students (70%).
3. There is a significant effect on the effect of education through zoom meetings on cervical cancer on the knowledge of adolescent girls because the value of $t_{count} > t_{table} = 15.627 > 2.023$ and when $\alpha > p \text{ value} = 0.05 > 0.000$.

Suggestion

1. For STIKes Muhammadiyah Ciamis
This research is expected to be used as a source of reference or useful information to broaden insight and can be used as further research with wider variables.
2. For Teenagers
It is hoped that it can add insight by providing information to adolescents about cervical cancer, so that adolescents can increase knowledge and prevent cervical cancer.
3. For Researchers
Adding insight and as an exercise in increasing knowledge in carrying out nursing research, as data to conduct further research on the effect of zoom meeting education on cervical cancer in adolescent girls at SMA Negeri 1 Lumbung.
4. For Medial Zoom Meeting
Add insight into operating the zoom meeting application optimally as a medial tool in health education about cervical cancer in adolescent girls at SMA Negeri 1 Lumbung.

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