Effect of Health Education on Mother's Knowledge of Human Papilloma Virus in Prevention of Cervical Cancer in Kairatu Village, West Seram District

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ABSTRACT

Cervical cancer is a primary cancer of the cervix originating from epithelial metaplasia in the squamous columnar junction (SSK) which is the transition area of the vaginal mucosa and cervical canal mucosa. The purpose of this study was to determine the effect of health education on mothers' knowledge about the human papilloma virus in preventing cervical cancer in Kairatu Village, West Seram District. This study used quasi-experimental methods, with a one group pre-post test approach. The data analysis used was univariate analysis and bivariate analysis using paired sample t test statistics with significance (α = 0.05). The research results found in this study were respondents with good knowledge before being given Health Education as many as 2 people (2.1%) and respondents with good knowledge after being given Health Education as many as 77 people (80.2%). Then respondents with sufficient knowledge before being given Health Education were 27 people (28.1%) and respondents with sufficient knowledge after being given Health Education decreased, namely 19 people (19.8%). Meanwhile, respondents with less knowledge before being given Health Education were 67 people (69. 8%) and after being given Health Education it decreased. With ρ = 0.000 or ρ < 0.05. the effect of HE between t count and t table is t count > t table, meaning that H0 is rejected. Namely, it is known that the calculated t value is 24,240 while in the t table with a significance of 0.05, the degrees of freedom (df) n-1 (96-1 = 95) get the number 1,985. So it can be concluded that H0 is rejected, meaning that there is an influence between before and after being given HE. concluded So it can be concluded that H0 is rejected, meaning that there is an influence between before and after being given HE. concluded So it can be concluded that H0 is rejected, meaning that there is an influence between before and after being given HE. It was concluded statistically that there was a significant effect on the mother's knowledge about the Human Papilloma Virus in preventing cervical cancer before and after being given Health Education in Kairatu village.

Keywords: *Cervical cancer knowledge, health education, human papilloma virus*

INTRODUCTION

Cervical cancer is a primary cancer of the cervix originating from epithelial metaplasia in the squamous columnar junction (SSK) which is the transition area of the vaginal mucosa and cervical canal mucosa.

About 270,000 women died from cervical cancer in 2012. Women in low- and middle-income countries experienced more than 85% of deaths from cervical cancer 3. The most common cancer among women worldwide after breast cancer is cervical cancer. Cervical cancer is the second leading cause of death after cardiovascular disease4,5,6. Developing countries like Indonesia often found cervical cancer7 . There are 41 new cases of cervical cancer in Indonesia every day and 20 women die. It is

estimated that every one hour a woman dies from cervical cancer. Basic Health Research Data for 2013 the prevalence of cancer in Indonesia is 1.4 per 1000 population. Cervical cancer ranks second after breast cancer. The scope of the cervical cancer screening program in Indonesia is only about 5% of women who carry out early detection of cervical cancer. So that is what can cause the high cases of cervical cancer in Indonesia (Sunarti, 2016).

In Indonesia, cervical cancer is the number two cause of death in adult women (Fulviona, 2011). Every year, there are at least 15,000 new cases of cervical cancer and 7,500 deaths from cervical cancer. This cancer is the second most common case in Indonesian women of reproductive age between 14-44 years (Fulviona, 2011). Cancer is a non-communicable disease which is characterized by the presence of abnormal cells/tissues that are malignant, grow quickly uncontrollably and can spread to other places in the patient's body (Ministry of Health RI; 2016). If appropriate control measures are not taken, around 13.1 million people are predicted to die in 2030 WHO (2013, in the Indonesian Ministry of Health; 2016).

Uterine cancer is still a serious issue in society, this is because the incidence of uterine cancer is still increasing day by day. This incident is the responsibility of health workers in an effort to suppress and reduce risk factors at the promotive and curative stages. Promotive factors can contribute significantly through increasing community knowledge on an ongoing basis without discrimination or seeing the position of a sufferer.

West Seram District is one of the areas with the largest population in Maluku Province, with declining health data. Considering that cervical Ca is ranked the highest in the world and in Indonesia, Maluku Province for cervical Ca is ranked first for cancer with a total of 824 sufferers (Provincial Health Office; 2013). Based on data from the West Seram District Health Office in 2016, it was found that there were 13 cervical cancer sufferers with positive IVA (SBB Health Office, 2016). Based on the District Health Office's Annual Report. SBB in 2015, the number of cervical Ca cases with positive IVA was 13 people spread across the Kairatu sub-district (SBB District Health Office, 2016).

Data from the Kairatu Health Center, Kairatu District, West Seram Regency (2016), noted that the VillageKairatu is a village located on the coast to the mountains, with 12 hamlets and a population of 9,097 people consisting of 4,668 men and 4,429 women, with a total WUS of 2,230.Data from the Kairatu Health Center, Kairatu District, showed that there were 13 cases of IVA positive with 1 gynecological abnormality.

LITERATURE REVIEW
1. Cervical cancer
A. Definition

Cancer is an important health problem for women all over the world, especially in developing countries like Indonesia. The incidence of cancer that has the highest contribution in women in Indonesia are cervical and breast cancer. This occurrence increased because minimal effective screening measures taken so that precancerous conditions or early-stage cancer cases are detected.

The main target of efforts to prevent and reduce the incidence of cervical cancer is all levels of society as mandated by the state as stated in Law Number 36 of 2009, regarding Health mentioned in the preamble considering that every activity is in an effort to maintain and improve the degree of public health which at the highest level is carried out based on non-discriminatory, participatory and sustainable principles in the framework of forming Indonesian human resources, as well as increasing the resilience and competitiveness of the nation for national development. This law is a form of government firmness in human development efforts towards a healthy and competitive nation.

Cervical cancer is cancer that grows in cells in the cervix. This cancer is common develops slowly and only shows symptoms when it

enters an advanced stage. Therefore, it is important to detect cervical cancer early before serious problems arise.

The cervix or cervix is the part of the uterus that is connected to the vagina. Its function is to produce mucus which helps transport sperm from the vagina to the uterus during sexual intercourse. The cervix also functions to protect the uterus from bacteria and foreign objects from outside.

B. Types of Cervical Cancer
Cervical cancer is divided into two types, namely:
1. **Squamous cell carcinoma (SCC)**
   Squamous cell carcinoma is the most common type of cervical cancer. SCC begins in cervical squamous cells, which are cells that line the outside of the cervix.
2. **Adenocarcinoma**
   Adenocarcinoma is a type of cervical cancer that starts in glandular cells in the cervical canal.

C. Causes of Cervical Cancer
Cervical cancer occurs when healthy cells undergo changes or mutations. This mutation causes these cells to grow abnormally and uncontrollably, thus forming cancer cells. It is not yet known what causes the change in the gene. However, this condition is known to be associated with HPV infection.

2. Knowledge
A. Understand
Knowledge is information that is known or realized by someone. In another sense, knowledge is a variety of symptoms encountered and obtained by humans through the observation of reason. Knowledge arises when a person uses his mind to recognize certain objects or events that have never been seen or felt before.

With better knowledge about cervical cancer and its problems, women can understand the dangers of cervical cancer and the importance of early detection of cervical cancer for their health so that they are willing to actively participate in cervical cancer early detection programs (Ratna Sari, 2015).

According to WHO, one of the behavior change strategies is the provision of information. By providing information about cervical cancer and its dangers, knowledge can be obtained that will influence a person's attitude. A positive attitude causes women to behave according to the knowledge they have, in this case, women's participation in cervical cancer early detection programs

B. Source Knowledge
1) Trust based on tradition
2) Customs and religion
3) The five senses/experience
4) Minds
5) Individual intuition

C. Factor-Factors Influencing Knowledge
1) Education
2) Media
3) Information

MATERIALS & METHODS
This study used quasi-experimental methods, with a one group pre-post test approach. This research was conducted in Kairatu Village, Kec. Kairatu Kab. SBB.

The population used in this study is the number of mothers (Women of Reproductive Age) in Kairatu village, Kairatu sub-district, West Seram Regency, with a total population of 2,230 WUS and a sample size of 96 respondents. In this study using systematic random sampling technique (Systematic Random Sampling).

The instrument in this study is the Questionnaire. The data collection technique was by giving consent question sheets and distributing questionnaires to mothers, then explaining the procedure for filling out the questionnaires and providing Health Education and carried out in a home to home manner.

The data obtained are:
1. Primary data
   Primary data is the result of a questionnaire that has been filled in by

respondents in Kairatu Village, Kairatu District, West Seram Regency.

2. Secondary data

   The data taken was the identity of WUS in Kairatu village at the time of the study.

STATISTICAL ANALYSIS

The data analysis used was univariate analysis and bivariate analysis using paired sample t test statistics with significance ($\alpha = 0.05$).

RESULT

A. Characteristics of Respondents

Table 1.1 Distribution of Frequency by Age in Kairatu Village, Kab. SBB

Age	Amount	%
25-30	15	15.6
31-35	23	24.0
36-40	33	34.4
41-45	25	26.0
Total	**96**	**100**

Based on table 1.1, it is known that most of the respondents aged 36-40 years were 33 people (34.4%) and the least aged 25-30 years were 15 people (15.6%).

Table 1.2 Frequency Distribution Based on Education in Kairatu Village, Kab. SBB

Education	Amount	%
No school	7	7.3
Sd	32	33.3
Junior High School	3	3.1
Senior High School	26	27.1
D3	17	17.7
S1/S2	11	11.5
Total	**96**	**100**

Based on table 1.2, it is known that most of the respondents had elementary school education as many as 32 people (33.3%) and the least educated junior high school were 3 people (3.1%).

Table 1.3 Frequency Distribution Based on Occupation in Kairatu Village, Kab. SBB

Work	Amount	%
Working	59	61.5
Doesn't work	37	38.5
Total	**96**	**100**

Based on table 1.3, it is known that most of the respondents worked as many as 59 people (61.5%), and the least did not work as many as 37 people (38.5%).

B. Univariate analysis

1. Knowledge of Respondents in Kairatu Village, Kec. Kairatu Kab. SBB Before Given Penkes

Table 1.4 Distribution of Mother's Knowledge About Human Papilloma Virus in Prevention of Cervical Cancer in Kairatu Village, Kab. SBB Before Given Penkes.

Knowledge	Amount	%
Well	2	2,1
Enough	27	28,1
Not enough	67	69.8
Total	**96**	**100**

Based on table 1.4, it is known that the majority of respondents had less knowledge about the Human Papilloma Virus in the Prevention of Cervical Cancer before being given the Health Education Center, as many as 67 people (69.8%) and at least 2 people (2.1%) had good knowledge.

2. Knowledge of Respondents in Kairatu Village, Kec. Kairatu Kab. SBB After Being Given Penkes

Table 1.5 Distribution of Respondents' Knowledge About the Human Papilloma Virus in Prevention of Cervical Cancer After Being Given Health Centers

Knowledge	Amount	%
Well	77	80,2
Enough	19	19,8
Not enough	0	0.00
Total	**96**	**100**

Based on table 1.5, it is known that the majority of respondents have a good level of knowledge about the Human Papilloma Virus in the Prevention of Cervical Cancer after being given a good health education as many as 77 people (80.2%) and at least 19 people (19.8%) have sufficient knowledge.

C. Bivariate Analysis

1. The Influence of Health Education Before and After Giving Penkes.

Table 1.6 The Influence of Health Education Before and After Health Education for Mothers in Prevention of Cervical Cancer in Kairatu Village, Kab. SBB

Mother Knowledge	Pre-test		post-test	%	sig. (ρ)
	n	%	n		
Well	2	2.1	77	80.2	.000
Enough	27	28.1	19	19.8	
Not enough	67	69.8	0	0	
Total	**96**	**100**	**96**	**100**	

Based on table 1.6, it is known that respondents with good knowledge before being given Health Education were 2 people (2.1%) and respondents with good knowledge after being given Health Education were 77 people (80.2%). Then respondents with sufficient knowledge before being given Health Education were 27 people (28.1%) and respondents with sufficient knowledge after being given Health Education decreased, namely 19 people (19.8%). Meanwhile, respondents with less knowledge before being given Health Education were 67 people (69.8%) and after being given Health Education it decreased. With $\rho = 0.000$ or $\rho < 0.05$.

Table 1.7 Effects of Providing Health Education Based on t Count and t Table.

The influence of HE	t count	t table
pre-test		
post-test	24,240	1985

Based on table 1.7, the effect of HE between t count and t table is t count > t table, meaning that H0 is rejected. Namely, it is known that the calculated t value is 24,240 while in the t table with a significance of 0.05, the degrees of freedom (df) n-1 (96-1 = 95) get the number 1,985. So it can be concluded that H0 is rejected, meaning that there is an influence between before and after being given HE.

DISCUSSION

Health education is an effort or activity to assist individuals, groups and communities in improving their abilities, knowledge, attitudes and skills to achieve life. The low knowledge factor is one of the factors causing the incidence and death from cervical cancer (Pratiwi et al: 2015).

Cervical cancer or cervical cancer is a malignancy that occurs in the cervix which is the lowest part of the uterus that protrudes to the top of the canal of intercourse or vagina (Depkes RI; 2016).

Prevention of cervical cancer is by early detection. Early detection of cervical cancer can be done by detecting changes in cervical cells with a pap smear or Acetic Acid Visual Inspection (IVA) and handling them appropriately before they become cervical cancer (Eva et al: 2014).

Based on the results of the paired sample t-test with a significance value of $\alpha = 0.05$ which from the results of the study obtained $\rho < 0.05$, namely 0.000 with a degree of freedom (df) of 95 and a calculated t value of 24.240. so, t count > t table then H0 is rejected. Because the t count > t table (24,240 > 1,985) and a significant 0,000 <0.05, H0 is rejected and H1 is accepted. So it can be concluded that there is an influence before and after being given Health Education with Mother's Knowledge.

According to the assumptions of researchers, Health Education contributes and increases understanding and insight in increasing the knowledge of respondents. So that cervical cancer can be prevented and avoided as early as possible.

This research is in accordance with the results of research conducted by Pratiwi et al (2015) with the title "the effect of health education on knowledge about cervical cancer in women of reproductive age", the 2015 Yogyakarta Midwifery Academic which stated that the difference in knowledge before and after being given health education about cancer The cervix was tested using the paired T test, showing a t value of 7.023 (p-value 0.000 less than 0.05).

Thus it can be concluded that there is a significant difference between knowledge about cervical cancer before and after being given health education. From the results of these tests indicate that the working hypothesis can be accepted as evidenced by the analysis which shows a significant difference of each variable tested. In this study, there was a change in respondents' knowledge about cervical cancer, one of which was influenced by the effectiveness of the presenters when providing health education about cervical cancer so that respondents could concentrate and be interested in receiving material. The existence of health education about cervical cancer is expected to have a positive impact on changes in respondents' health behavior so that it will indirectly improve health

status.

CONCLUSION

Based on the research results it can be concluded that:

1. Most respondents' knowledge before being given Health Education was in the less category and the least was in the good category.
2. Most of the respondents' knowledge after being given Health Education was in the good category and the least was in the sufficient category which was found in this study.
3. Statistically it was found that there was a significant effect on mother's knowledge about Human Papilloma Virus in preventing cervical cancer before and after being given Health Education in Kairatu village

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