The Effect of Health Promotion on The Knowledge of Reproductive Age Women in Preventing Cervical Cancer

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Abstract

Cervical cancer is a health problem that affects countries in the world, especially developing countries. In Indonesia, cervical cancer ranks second after breast cancer. Of the 33 provinces in Indonesia, the highest number of cervical cancer sufferers is in East Java, 21,313 cases with a mortality rate of 10.3%. Efforts to prevent cervical cancer are carried out by early detection of cervical cancer, but this is not widely known to the wider public. One method for disseminating information about preventing cervical cancer is through health promotion. This research was conducted to determine the effect of health promotion on reproductive age women knowledge in preventing cervical cancer. This research took the form of a quasi-experiment with a non-randomized-pretest-posttest control group design. The population in this study was 823 reproductive age women in the work area of the Purwodadi II Health Center, a sample of 40 respondents was taken. The sample was separated into two groups, the group that was given health promotion and the group that was not given health promotion. The instrument used to measure knowledge before and after health promotion was a questionnaire. Data were analyzed using the t-test. Based on the results of data analysis, the following were obtained: (1) there was a significant difference in the knowledge of reproductive age women before and after being given health promotion (p= 0.000). (2) there is a significant difference in of reproductive age women's knowledge between the experimental group and the control group (p= 0.000). Health promotion can increase knowledge in preventing cervical cancer. This health promotion can be applied in everyday life.

Keywords: Health Promotion, Knowledge, Cervical Cancer

Introduction

Based on data from the World Health Organization (WHO), more than 270,000 women
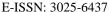
die from cervical cancer every year, and more than 85% occur in developing countries [10]. In Southeast Asia, cervical cancer ranks second among female cancer sufferers [6]. In Indonesia, cervical cancer ranks second after breast cancer. There were around 20,928 new cases of cervical cancer and deaths due to cervical cancer with a percentage of 10.3% [11]. Based on data from Dharmais Hospital patients during 2010 – 2015, the number of new cases and the number of deaths due to cancer continues to increase. Out of the 33 provinces in Indonesia, the highest incidence of cervical cancer is in East Jawa which was 21,313 cases, and second place is in Central Java with 19,734 cases [10]. Of the 18,954 WUS carried out by Visual Acetate Inspection (IVA), 1,868 WUS were found positive (IVA) or 9.86%, this figure is higher than that set by the Ministry of Health, which was 3%. Grobogan Regency is ranked fifteenth with a cervical cancer incidence rate of 7.86% [8]. Cervical cancer is the growth of abnormal cells in the cervical tissue (cervix) which is located between the uterus and vagina [3]. According to the World Health Organization (WHO) theory in Notoatmodjo (2007), one form of health object can be described by knowledge obtained from one's own experience. What is meant by Women of Childbearing Age are women whose reproductive organs are functioning well between the ages of 20-45 years.

Efforts to detect cervical cancer early are by doing a Pap Smear and IVA Test. Health promotion is an effort by health workers to improve community capabilities through learning so that people can help themselves, as well as developing activities that are community resourced according to local social culture and supported by public policies that are healthoriented [5].

Method

The type of research carried out was a quasi-experimental design. This type of research is used to look for cause and effect by giving health promotion treatment at a certain time to those who are not given treatment, then studying the effects of the treatment (Murti, 2008). The approach taken was a non-randomized pre-test-pot test with control group design, by knowing the comparison of the knowledge of the group that was given treatment with the group that was not given treatment (Setiawan & Saryono, 2011). The population in this study were all women of childbearing age in the work area of the Purwodadi II Health Center from the period January 2017 to October 2017, totaling 823 people. The sample in this study was 40 people divided into 20 per experimental group

and 20 per control group. The location of this research was carried out in the work area of the Purwodadi II Community Health Center in Kandangan Village, Grobogan Regency, Central Java. This research was conducted in September - December. There are 2 variables in this study, the dependent variable (dependent variable) is knowledge of cervical cancer prevention and the independent variable (free) is health promotion. The data collection tool used to measure the level of knowledge of women of childbearing age in this study was primary data in the form of a questionnaire. Researchers attached the Extension Event Unit (SAP) as a schedule for health education events regarding health promotion and prevention of cervical cancer.

Results

Respondents' Characteristics

Tabel 1 Respondents' Characteristics

Age	f	%
< 20 years old	0	0
20 – 30 years old	23	57,5
31 – 40 years old	17	42,5
> 40 years old	0	0
Education Background		
Elementary school	0	0
Junior High School	29	72,5
Senior High School	10	25
University	1	2,5
Occupation		
Housewife	30	75
Self-employed	3	7,5
Farmers	7	17,5

Based on table 1, it can concluded that majority of the respondents are 20-30 years old (57.5%), had junior high school eduaational background (72.5%) and were housewife (75%).

Tabel 2. Knowledge of Cervical Cancer Prevention in Control Group

Knowledge	Pre Test		Post Test	
	f	%	f	%
High	0	0	0	0
Medium	0	0	0	0
Low	20	100	20	100
Total	20	100	20	100

Tabel 3 Knowledge of Cervical Cancer Prevention in Experiment Group

Knowledge	Pre Test		Post Test	
	f	%	f	%
High	0	0	8	40
Medium	4	20	12	60
Low	16	80	0	0
Total	20	100	20	100

Hypothesis testing

Comparison of Pre Test and Post Test Knowledge in the Experimental Group

Table 4 Wilcoxon Test Pre and Post Test in the Experimental Group

Pre Test – Post Test	Mean Ranks		Z	P
	Negative Ranks	Positive Ranks		
Knowledge	0.00	10.50	-3.926[b]	0.00

Table 6 shows that the knowledge test has a p-value <0.05 so that Ha1 is accepted and the Z value is -3.926. Thus it can be concluded that there is a difference in knowledge before and after health promotion. The mean ranks for positive rankings are greater than negative rankings, indicating that the differences are positive. In other words, health promotion causes increased knowledge among Women of Childbearing Age (WUS).

Comparison of Pre and Post Test Knowledge in the Control Group

Table 5 Wilcoxon Pre and Post Test in the Control Group

Pre Test – Post Test	Mean Ranks		Z	P
	Negative Ranks	Positive Ranks		
Knowledge	0.00	0.00	0.000[b]	0.00

Table 5shows that the knowledge test has a p-value > 0.05 so Ho1 is accepted. Thus it

can be concluded that there is no difference in knowledge because the control group was not given health promotion

Comparison of Knowledge in the Control Group and the Experimental Group

Table 6 Mann Whitney Post Test in the Experimental and Control Group

Post Test	Mean Ranks		Z	P
	Control	Exsperimen		
Knowledeg	10.50	30.50	-5.434	0.00

Table 8 shows that this test has a p-value <0.05 so that Ha2 is accepted with a Z value of -5.434. Thus it was concluded that there was a difference in knowledge between the control group and the experimental group. The mean ranks of the experimental group are greater than those of the control group. This shows that providing health promotion is able to increase knowledge (WUS) about preventing cervical cancer.

Discussion

In From the data obtained through questionnaires, researchers discussed existing problems and compared them with previous research. The discussion is carried out based on the hypothesis and research objectives accompanied by data taken by the researcher.

General data

Age

Based on the results of research that has been conducted, the majority of mothers are 20–30 years old (57.5%) out of 40 women of childbearing age (WUS). According to the World Health Organization (WHO), every woman should be screened at least once at the age of 35-40 years. Women of childbearing age who are 35-55 years old and have previously been married and given birth have a high risk of experiencing problems with their reproductive health, which in reality is that now many women who suffer from cervical cancer arrive at an advanced stage and are not detected early.

After looking at previous research from sister Kasiati Bajduri, it can be concluded that more than some of the reproductive age group have low knowledge in carrying out early detection of cervical cancer. So age has a role in determining choices in making decisions.

Education

Based on the results of research conducted, most of the education of women of childbearing age is at junior high school level (72.5%). Education can influence a person's behavior and lifestyle, especially in motivating them to participate in development. In general, the higher a person's education, the easier it is to receive information (Nursalam, 2008).

Work

In this study, the majority of respondents in the experimental group and control group were housewives (75%). According to Thomas in Nursalam (2008) work is done to support family life and life. Working will also have an influence on the family's ability to meet nutritional, educational and other needs.

In sister Lia Karisma Saraswati's research, she found that women who were given free screening cards underwent more screening than women who were not given free screening cards. The implementation of free screening in early detection of cervical cancer results in low socio-economic status having no influence on women's behavior in cervical cancer screening, so that free cervical cancer screening efforts, especially for low socio-economic women, will increase the practice of cervical cancer screening.

Research data

Based on the Wilcoxon results obtained in the experimental group, it shows that the knowledge test has a P-Value < 0.05 so that Ha1 is accepted. In other words, it was concluded that there was a difference in knowledge before and after being given health promotion about preventing cervical cancer. Mean Rank obtained by Negative Rank = 0.00 and Positive Rank = 10.50. So the positive ranking is greater than the negative ranking, indicating that the difference is positive. In other words, health promotion regarding cervical cancer prevention increases knowledge of women of childbearing age. Meanwhile, the control group showed that the knowledge test had a P-Value > 0.05 so that H01 was accepted. The mean rank obtained is negative rank = 0.00 and positive rank = 0.00. In other words, it can be concluded that there is no difference in knowledge because the control group was not given health promotion about preventing cervical cancer. In the Mann Whitney post test the experimental group and control group showed that the P-Value was <0.05 so Ha2 was accepted. Mean control rank = 10.50 and mean

experiment = 30.50. In other words, it can be concluded that the mean rank of the experimental group is greater than the mean rank of the control group. This shows that providing health promotion about preventing cervical cancer can increase knowledge of women of childbearing age.

Health promotion is any form of combination of health education and interventions related to economics, politics and organizations designed to facilitate behavior and an environment that is conducive to health in Green in Notoatmodjo (2010). Health promotion in this study is the prevention of cervical cancer in women of childbearing age. Health promotion is provided with the aim of increasing knowledge of women of childbearing age about preventing cervical cancer. The knowledge provided is in the form of understanding cervical cancer, causes of cervical cancer, risk factors for cervical cancer, signs and symptoms of cervical cancer, prevention of cervical cancer and treatment of cervical cancer. The hope to be achieved is that women of childbearing age can apply the knowledge that has been provided in their daily lives, including by carrying out early detection examinations for cervical cancer, and can avoid the causes and risk factors for cervical cancer.

Health promotion is provided using leaflet media. According to Laras (2009) leaflet media is a form of conveying information or health messages through folded sheets. The information content can be in the form of sentences or images or a combination. Health promotion with leaflets is also accompanied by questions and answers where participants have the opportunity to ask questions about material they do not understand. This will enable respondents to better understand the material that has been given. Meliono (2007) stated that the higher a person's level of knowledge about health, the more aware a person will be to behave in a healthy lifestyle, including women's participation in early detection programs for cervical cancer.

In previous research conducted by Brother Dwi, it was said that there was high motivation for early detection of cervical cancer with high knowledge. And Damindro also found a significant relationship between respondents' knowledge and attitudes towards Pap smears.

The results of this research are in accordance with Linda Karisma Saraswati's research which shows that carrying out intervention will increase a person's level of knowledge about a particular object, namely cervical cancer and preventing cervical cancer.

Knowledge will not increase and develop if there is no addition of health promotion.

Conclusion

From the results of the research and discussion, it can be concluded that there is an influence of health promotion on the knowledge of women of childbearing age (WUS) about preventing cervical cancer before and after being given health promotion in the experimental group. After that, there was no influence on the knowledge of women of childbearing age (WUS) about preventing cervical cancer in the control group. Finally, there was a comparison of knowledge of women of childbearing age (WUS) about preventing cervical cancer in the control group and the experimental group.

Acknowledgment

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