THE RELATIONSHIP OF KNOWLEDGE AND INFORMATION AVAILABILITY ON CERVICAL CANCER EARLY DETECTION IN CHILDBEARING AGE COUPLES WITH VIA METHOD IN TAKALAR

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ABSTRACT

There are two types of cancer that attack women in the world, namely breast cancer and cervical cancer, which is the highest type of cancer prevalence in women in Indonesia. This study aims to analyze factors related to early detection of cervical cancer through VIA methods in couples of childbearing age in the Community Health Centre (Puskesmas) work area North Galesong Takalar Regency. The study was an observational study using the Cross Sectional method. Interviews were conducted on 350 women of childbearing age at the North Galesong Health Center in Takalar Regency to analyze factors related to early detection of cervical cancer by Visual Inspection with Acetic Acid (VIA) method. the data were analyzed using the chi square test and multiple logistic regression. The results showed the factors associated with the participation of couples of reproductive age in early detection of cervical cancer with the VIA method, namely Knowledge Value p = 0.015 and Information Availability Value p = 0.023. To the North Galesong Community Health Center Takalar Regency urged to provide counseling to improve insights and knowledge about the importance of cervical cancer early detection using the VIA method.

Keywords: Knowledge, Information Availability, Early Detection, Cervical Cancer.

INTRODUCTION

Cancer is a disease caused by abnormal growth of growing tissue cells that turn into cancer cells. In its development, cancer cells can spread to other parts of the body so that it can cause death. Cancer is the biggest contributor to death after heart disease. This high death rate from cancer has attracted the attention of a number of health activists in the world. Many articles and seminar activities that discuss the topic of cancer. A number of data from various health units continuously recorded and published to various media with reports of growth in the number of patients each year increasing (Ministry of Health, 2017).

Based on data from WHO, it is known that there are 493,243 people per year with new cervical cancer in the world with a mortality rate of 273,505 people per year. in Indonesia, there are 15,000 new cases of cervical cancer with a mortality rate of 7500 cases per year. The data shows that every 30 minutes women get cancer and every 1 hour women die from cancer (WHO 2017).

Research Results Rahayu et al., (2018) indicate a problem in the effort of cervical cancer screening, namely the presence of obstacles or obstacles encountered in the implementation of the program of early detection of cervical cancer more to the participation of the target community itself. Where social and environmental status and regional culture that is still thick make the target of women of childbearing age feel reluctant and ashamed to do the examination. In addition, fear and worry about the results obtained and known also made them unwilling to go to a health worker.

National Population and Family Planning Board (BKKBN) data in 2015, for IUD contraception as many as 36,601 (6.87%), this does not meet the target due to the low public knowledge about contraception, so to increase knowledge and low interest can be actively empowered by means of counseling or active participation activities with the increasing number of more innovative methods of extension methods, one of which is by incorporating educational methods in counseling, for example by playing snakes and ladders (Moedjiono et al., 2019). Through increasing public knowledge and interest in the installation of IUD contraceptives, the number of fertile age couples who will carry out early detection of cervical cancer will also increase.

The South Sulawesi Health Office explained that the largest cancer and cervical breast cancer patient in the city of Makassar is Gowa Regency. Wajo, Bone, and North Luwu, breast cancer cases were recorded for 203 cases in hospitals, and 316 in health centers. Then there were 109 cases of cervical cancer in the hospital, and 275 cases in the clinic. Whereas in 2009 the number of breast cancer cases in 252 hospitals and 600 health centers, while 97 cervical cancer cases and 177 in the clinic. Ministry of Health chronic disease with Early detection program with Visual Acetic acid Inspection In addition, the provision of early breast cancer detection equipment was provided at Syekh Yusuf Gowa General Hospital as a pilot project (Salmah et al., 2014).

Based on the preliminary survey it is known that Takalar Regency Hospital data in 2018 out of 15 health centers with 112 visits to fertile age couples had 7 people with cervical cancer and in Galesong Utara Community Health Center the number of mothers who conducted early detection of cervical cancer by VIA method in 2018 8 people from 3895 couples of childbearing age, with the results of the examination it was found that 2 mothers were detected by Positive VIA.

Efforts to overcome these limitations, early detection with the method of Visual Inspection with Acetic Acid (VIA) is a feasible choice in developing countries. VIA is one method for early detection of cervical cancer. Screening with VIA is stated to be easier, simpler, and cheaper

than pap smear tests and can be done in the lowest health facilities such as health centers (WHO 2013)

The VIA method provides results that are fast and can immediately receive treatment for pre-cancerous lesions using crystals on the same day and the same health facilities. The use of acetic acid will clarify differences in cell structure and absorption so that if pre-cancerous cells will turn white then the purpose of this study is to analyze the knowledge and availability of information with early detection of cervical cancer through visual inspection of VIA acetic acid in women of childbearing age in the working area of North Galesong Health Center Takalar Regency.

METHODOLOGY

This type of research is observational with Cros Sectional design. This research was conducted at the North Galesong Health Center in Takalar Regency, South Sulawesi Province. The population in this study were all couples of reproductive age around 20-45 years in the working area of North Galesong Health Center Takalar Regency in 2018. A sample of 350 mothers of fertile age couples. Sampling was done based on inclusion criteria from all mothers who examined their health at the North Galesong Health Center in Takalar Regency.

Data collection was obtained through secondary data from the North Galesong Health Center, Takalar Regency. Primary data is obtained by conducting guided interviews and directed at fertile age couples who come at the Puskesmas using a questionnaire to explore information about the variables to be analyzed in this study which are closely related to the early detection of cervical cancer by the VIA method. Data on general characteristics of respondents, independent variables and dependent variables were processed using SPSS. To find out the relationship between knowledge and availability of information about early detection of cervical cancer in couples of childbearing age with visual inspection methods of acetic acid in North Galesong Health Center, Takalar Regency, univariate data analysis was used, bivariate analysis with Odds Ratio and multivariate analysis with multiple binary logistic regression.

RESULTS AND DISCUSSION

Table 1. Frequency Distribution of Respondents Based on Participation of couples of childbearing age at Galesong Health Center north of Takalar Regency

Participation	Frequency (total)	Presentage %
Yes	312	89.2
No	38	10,8

Table 1 shows that respondents who wanted to participate in the early detection of cervical cancer with the VIA method were 312 people (89.2%) and respondents who did not want to participate in early detection of cervical cancer with the VIA method were 38 people (10.8%).

Table 2. Distribution of general characteristics of fertile age couples in Galesong Health Center north of Takalar Regency

Variable	PUS Participation	
	Frequency	**Percentage %**
Age		
20-30	152	43.4
31-35	67	19.1
36-45	131	37.4
Education		
Did not graduate from	86	24.6
Elementary School	120	34.2
Junior School	82	23.5
High School	38	10.8
Higher Education	24	6.9
Employment		
House Wife	178	50.9
entrepreneur	27	7.7
Staff	21	6.0
Farming	124	35.4

Table 2 Age characteristics of respondents based on age indicate that respondents aged 20-30 years as many as 152 people (43.4%), while women of childbearing age aged 31-35 years as many as 67 people (19.1%), respondents with age 36-45 as many as 131 people (37.4%).

Characteristics based on education level show that the number of respondents at the education level did not finish elementary school 86 people (24.6%), the number of respondents at the elementary education level graduated was 120 people (34.2%) and the number of respondents with junior high school level was 82 people (23.5 %), the number of respondents at the high school education level is 38 people (10.8%) and the number of respondents with tertiary education level is 24 people (6.9%).

Characteristics of respondents based on work showed that job characteristics with participation of fertile age couples in early detection of cervical cancer by VIA method were the number of respondents with employment status of housewives as many as 178 people (50.9%), self employed as many as 27 people (7.7%), and employees 21 people (6.0%) and Farming 124 people (35.4%).

Table 3. Bivariate Analysis of Fertile Age Pair Participation in early detection of cervical cancer by the VIA method

Table 3 shows the analysis of the bivariate test results between the relationship of knowledge and participation of couples of reproductive age in the early detection of cervical cancer with the VIA method in respondents with sufficient level of knowledge and want to participate in early detection of cervical cancer with the VIA method of 141 people (40.2%) and respondents who were knowledgeable enough but did not want to participate as many as 12 people (3.4%) with the number of respondents with enough knowledge as many as 153 (43.6%) while

Variable	Participating				Total		Value P
	Yes		No				
	n	%	n	%	n	%	
Knowledge							
Enough	141	40.2	12	3.4	153	43.6	0.015
Less	171	49	26	7.4	197	56.4	
Information Availibility							
Enough	67	19,2	12	3,4	79	22.6	0.023
Less	245	70	26	7,4	271	77.4	

respondents with less knowledge and wanted to participate in early detection of cervical cancer with the VIA method were 171 (49%) and on respondents with less knowledge and do not want to participate 26 people (7.4%) with the number of respondents lacking knowledge that is 197 (56.4%) and the number of respondents with knowledge with a p-value of 0.015 this indicates there is a relationship of knowledge with participation of fertile couples to early detection of cervical cancer with the VIA method.

Table 3 The results of the analysis show the relationship of information availability with the participation of fertile age couples in the early detection of cervical cancer with the VIA method on respondents with sufficient level of information availability and want to participate in early detection of cervical cancer with the VIA method of 67 people (19.2%) and the number of respondents with the availability of sufficient information and not wanting to participate in early detection of cervical cancer with the VIA method is 12 (3.4%) with the number of respondents with sufficient information available, namely 79 people (22.6%) while 26 respondents with less information and not wanting to participate (7.4 %) and respondents who have less information and want to participate as many as 245 people (70%) with the number of respondents with less information available, namely 271 (77.4%) with a p-value of 0.023. Then there is a relationship between the availability of information and the participation of couples of reproductive age in the early detection of cervical cancer using the VIA method.

Table 4. Multivariate Test Results Determinants of early detection of cervical cancer couples of childbearing age by visual acetic acid inspection methods in the working area of North Galesong Health Center Takalar Regency.

Variable	B	S.E.	Wald	df	Sig	Exp(B)
Knowledge	-.159	.075	4.527	1	0.033	.853
Information Availability	.062	.026	5.856	1	0.016	1.064

Table 4 Knowledge, with a value of B = 159, with the participation rate assessed through Exp (B) = 853, this value implies that the relationship of knowledge with participation of fertile age couples in early detection of cervical cancer by the VIA method has a significant influence (p = 0.033) with sufficient knowledge it is likely to participate 4,527 times greater for early detection of cervical cancer with the VIA method than for respondents who have a low level of knowledge.

Table 4 Availability of information, with a value of B = .062, with the participation rate assessed through Exp (B) = 1064, this value implies that there is a relationship between availability of information and participation of fertile age couples in early detection of cervical cancer with the VIA method significantly (p = 0.016) with the availability of information, it is quite possible to participate in 5,856 in the early detection of cervical cancer with the VIA method than the respondents who lack information.

Good knowledge of the benefits of visual acetic acid (VIA) inspection in women of childbearing age will increase the participation of couples of childbearing age for early detection of cervical cancer. Multivariate test results obtained significance results with a value of p = 0.033 indicating that there is an influence of knowledge with the behavior of VIA examination. Knowledge variable Odd Ratio value is 4.527 means that mothers with good knowledge have the possibility to conduct VIA examination 4,527 times greater than mothers with less knowledge.

In Research conducted by Wantini et al., (2019) Most respondents did not conduct early detection with VIA test because they did not know about VIA. Factors related to early detection are knowledge (p-value = 0.003). The attitude of early detection and belief regarding cervical cancer is not related to early detection of cervical cancer. The research conducted by Gustiana et al (2014) at the Regional General Hospital Arifin Achmad Pekanbaru shows that there is a significant and positive relationship between WUS knowledge and VIA examination behavior that can be seen Wald test obtained a significance value of 0.045 with the results of analysis show respondents who have high knowledge have a chance of 2.34 times to do good preventive behavior compared to respondents who are low knowledgeable. High-level respondents also

had a 4.16 chance to do good preventive behavior compared to respondents who were moderately knowledgeable.

This study was also supported by the results of the study by Nordianti et al., (2018) which showed that respondents with good knowledge and VIAvisits were 18 (18.8%) respondents, and those who had never visited VIA were 25 (26.0%). respondent. While respondents with less knowledge category and had visited VIA as many as 9 (9.4%) respondents, and those who never visited VIA were 44 (45.8%) respondents. The results of data analysis showed that there was a relationship between knowledge and VIA examination visits (p = 0.014). Respondents with knowledge about cervical cancer and good early detection of VIA had an awareness of 2.46 times greater than to those with low knowledge.

The above is in accordance with the theory described by Notoatmodjo (2007), stating that knowledge or cognitive is a very important domain for the formation of one's actions, and according to him there are several factors that influence behavior, including age, education, work environment, and experience. The results of this study also found that mothers with less knowledge were 197 (56.4). After interviewing using questionnaires, the results of couples of childbearing age with less knowledge and willing to participate in the early detection of cervical cancer as many as 171 (49%) and 26 mothers (7.4%) in the results of the chi test were obtained. square with p value = 0.015. because Knowledge, experience and education are factors that influence a person in health behavior.

Experience can be obtained from one's own experience and those of others. Experience that has been obtained can expand one's knowledge while education can bring insight or knowledge of someone who will influence in their behavior. In general, someone with a higher education will have more knowledge than someone with a lower level of education.

Availability Factors Information affects a person's ability to think, and behaving and maturity of someone to take positive action, availability or exposure to information will form opinions that influence individual behavior. Information can be received through health workers directly through counseling, health education, from village officials through broadcasting dasawisma group groups, through mass media, leaflets, television broadcasts and others.

Based on this study the relationship of information availability with the participation of women of childbearing age in the early detection of cervical cancer by VIA method with a number of respondents with sufficient information availability of 79 people (22.6%) and the number of respondents with information availability was less than 271 people (77.4%). Multivariate test results obtained significance results with a value of p = 0.016.

Health information can be obtained from electronic media, especially the internet, which can be accessed by cell phone, but respondents aged 20-30 only use the internet as a place for social media such as playing facebook and so on, not to obtain health information. In respondents aged 36-45 years the number of respondents with less information available was 104 people (29.7%) and the availability of sufficient information as many as 27 people (7.7%) this was caused by respondents with that age having limited access to information, especially internet media because of ignorance in using cellular phones. Therefore they only get health information from the television or from health workers if they come to check their health at the Puskesmas. There is still a view and opinion of the community about the implementation of programs that have not been optimal, especially in terms of health promotion and information sources related to the program. Health promotion related to program supervision, frequency of socialization, rationing and restrictions on participants, while information sources included information and counseling media carried out by health workers. Suartini (2017).

The research conducted by Fauza et al., (2019), showed that there was a significant relationship between access to information and the participation of women of childbearing age in the early detection of cervical cancer VIA method with a p value of 0,000. This is because not all people, especially women of childbearing age, get information about the dangers of cervical cancer and early cancer detection tests.

The level of education and work status of a person influences the information received, when working someone will easily socialize with people in the workforce. this makes them easily exposed to information. The world of work is full of useful information that can increase one's insight so that they can change their mindsets. The more information that is received, the more knowledge gained including knowledge about early detection of cervical cancer and the more aware that health is important for life so motivated to do visits to health service centers.

This research is supported by research conducted by Wulandari et al., (2018) in the Sukmajaya Community Health Center work area results of the analysis showing that there is a relationship between access to information and the behavior of VIA examination. With p-value 0.039 and (OR = 0.272), this shows that one's exposure to health information obtained will encourage health behavior. Respondents who had been exposed to information about VIA examinations tended to know more about the dangers of cervical cancer and the benefits of conducting VIA examinations so that they would be encouraged to carry out VIA examinations. Respondents who have never received information about VIA examinations will make it impossible for him to carry out VIA examinations.

CONCLUSION

Knowledge, availability of information, significantly affected the behavior of fertile age couples to participate in early detection of cervical cancer by Visual Inspection with Acetic Acid (VIA) method. Suggestions for health workers should provide health education, counseling about the importance of prevention of cervical cancer so as to increase insight and knowledge about early detection of cervical cancer through VIA examination, not only for women of childbearing age but also husbands and families because husbands play a large role in reproductive daily life woman.

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