

THE RELATIONSHIP OF KNOWLEDGE, PERCEPTION AND FAMILY SUPPORT OF REPRODUCTIVE AGE WOMEN WITH EARLY DETECTION OF CERVICAL CANCER VISUAL ACETIC ACID INSPECTION METHOD AT BANJARMASIN PUBLIC HEALTH CENTER

Linda Kusumawati¹, Ruslan Muhyi², Husaini³, Roselina Panghiyangani⁴ and Bahrul Ilmi⁵

¹ Master of Public Health, Faculty of Medicine, Lambung Mangkurat University

^{2,4} Faculty of Medicine, Lambung Mangkurat University

³ Public Health Study Program, Faculty of Medicine, Lambung Mangkurat University

⁵ Polytechnic of Health, Ministry of Health Indonesia, Banjarmasin

Abstract— Cervical cancer is cancer that attacks the female reproductive organs. Reproductive age women need to understand that this type of cervical cancer can be prevented through early detection. Early detection of cervical cancer can be performed by Visual Acetic Acid Inspection (IVA) method. With early detection, the incidence of cancer can be found early so that the success of treatment is greater. This study aims to know the correlation between knowledge, perception and family support in the reproductive age women with early detection of IVA at Banjarmasin Public Health Center. This research is a quantitative research with the cross-sectional approach. Sampling was done with proportional random sampling. The sample in this research is 67 people by using the questionnaire as a measuring instrument. Data were analyzed using chi-square test and multiple logistic regression test. It is found that from 67 respondents, who conducted an IVA examination that is 15 people and who did not carry out the IVA examination there were 52 people. By using chi-square test, it was found that between knowledge with IVA examination was related to a p-value of 0.002 with OR 6.783, perception correlated significantly with IVA examination with p-value 0.000 and OR 26.444, while family support was related to IVA examination with p-value 0.003 and OR 6.000. Knowledge, perception, and family support influence on IVA examination in the reproductive age women at Banjarmasin Public Health Center.

Keywords— knowledge, perception, family support, IVA examination

I. INTRODUCTION

Women's reproductive health includes physical and mental health associated with the reproductive organs and their reproductive functions and processes [1]. Cervical cancer is cancer that occurs in the female reproductive organs, this disease occurs in women of reproductive age between 20-35 years [2]. The primary cause of cervical cancer is a chronic cervical infection with one or more high-risk, oncogenic strains of Human Papilloma Virus (HPV) causing cervical cancer to be transmitted through sexual contact [3]. The high number of female deaths in Indonesia due to cancer of the reproductive system is mostly caused by cervical cancer. Cervical cancer is the second most common cancer cases in women worldwide. Every year more than 270.000 women die from cervical cancer, and more than 85% occur in developing countries [4]. The incidence of cervical cancer can actually be suppressed by primary prevention efforts such as increasing or intensifying extension activities to the public to live a healthy lifestyle, immunization with HPV vaccine and followed by early detection of cervical cancer [5].

From preliminary study which have been done by researcher at 26 Public Health Center of Banjarmasin about early detection coverage of cervical cancer at woman of fertile age in Banjarmasin city as many as 273 (0.002%) of the total number of fertile women as many as 111,382

people in all Public Health Center on Banjarmasin in 2017. The low coverage of women of childbearing age for early detection of cervical cancer may be affected by several factors, such as knowledge of the dangers of cervical cancer, the perception of women of childbearing age in the visual inspection of acetic acid and the support of families to carry out the examination. As we know that Perception is a process that is owned by every individual in everyday life that receives stimulus or stimulus in the form of information that begins from the vision to form a response that occurs within the individual so that aware of everything in the environment through the senses it has [6]. Family support is an endorsement consisting of verbal and nonverbal advice, help and concrete actions given by a person because of the social relationships that affect emotional or behavioral effects for the recipient. This study aims to know and explain the relationship between knowledge, perception, and support of women of childbearing age with the examination of early detection of cervical cancer visual inspection method of acetic acid in Banjarmasin Public Health Center.

II. METHOD

This research is a research with a quantitative approach and using a cross-sectional design. The population in this study were women of childbearing age who are in the health center of Banjarmasin with the criteria that health centers have the facilities and has carried out examinations for early detection of cervical cancer. The total population of 55,108 women of childbearing age, with the criteria, are married and have a husband, and willing to be a respondent. In this study using the proportion of precision, sampling by proportion is done by taking the subjects of each region determined in proportion to the number of subjects in each region [7]. So in this research, there are 67 respondents, which is divided into public health center of Banjarmasin area with each area taken 2 public health center. This research used in this study was a questionnaire enclosed already provided the answer so that the respondent can just choose the appropriate answer. The advantage of using a questionnaire is that it can be shared simultaneously with the respondent. The questionnaires tested the validity and reliability of the instruments in one of the Banjarmasin public health center, namely Pelambuan Public Health Center with 30 respondents

III. RESULT AND DISCUSSION

Table 1. Frequency Distribution of Respondents Based on Behavior of IVA at Banjarmasin Public Health Center

	Frequency	Percentage
Behavior toward IVA examination		
No	52	77.6
Yes	15	22.4
Perception of Reproductive-Aged Women		
Positive	32	47.8
Negative	35	52.2
Family Support		
Yes	23	34.3
No	44	65.7

Table 2. The Relationship of Reproductive Age Women's Knowledge with IVA Examination

Knowledge	IVA Examination				Total	P-value	OR
	Yes		No				
	n	%	n	%			

Good	11	42.3	15	57.7	26	100	0.002	6.783
Enough	4	9.8	37	90.2	41	100		
Total	15	22.4	52	77.6	67	100		

Based on table 2, respondents are women of childbearing age who perform IVA examination with good knowledge category that is as much as 26 respondents with respondents who do IVA examination there are 11 people (42.3%), who do not do examination of IVA counted 15 people (57.7%), whereas fertile women with enough knowledge were 41 people and examined were 4 people (9.8%), did not conduct IVA examination as many as 37 people (90.2%). When viewed from the known variables, women of childbearing age in conducting IVA examinations have good knowledge.

The result of hypothesis test using chi-square test with degree of significance (α) 5%, got the result of $p\text{-value} = 0.003 < \alpha = 0.05$ or it can be said that there is a relationship between knowledge with IVA examination, while seen from Odds Ratio value 6.783 means women of childbearing age with good knowledge have a probability of 6.783 times greater to perform early detection of cervical cancer with IVA.

This study is in line with previous research conducted by Lyimo and Beran (2012) in Tanzania stating that there is a relationship between the level of knowledge about cervical cancer with the behavior of early detection of cervical cancer. the research mentioned that 59.8% of respondents have a low knowledge level, 21.2% with knowledge level and 19.2% with high knowledge level.

Table 3. The Relationship of Reproductive Age Women's Perception with IVA Examination

Perception	IVA Examination				Total	<i>P-value</i>	OR	
	Yes		No					
	n	%	n	%				n
Positive	14	43.8	18	56.2	32	100	0.000	26.444
Negative	1	2.9	34	97.1	35	100		
Total	15	22.4	52	77.6	67	100		

Table 3 shows that women of childbearing age who have positive perceptions are 32 respondents who do IVA examination ie 14 people (43.2%), and do not conduct IVA examination is 18 people (56.2%), while women of childbearing age which had negative perception, there were 35 people who did not conduct IVA examination as many as 34 people (97.1%) and who performed IVA examination as much as 1 person (2.9%).

The result of statistic with degree of significance (α) 5%, so that $p\text{-value}$ smaller than alpha value (0.05) got $p\text{-value} = 0.000$ meaning that there is a significant correlation between perception of woman of fertile age with IVA examination at Banjarmasin Public Health Center while seen from the value of Odds Ratio of 26.444 means that women of childbearing age with positive perceptions have the possibility of 26.444 times greater to perform early detection of cervical cancer with IVA. This is in line with the research conducted by Lubis (2015) that there is a significant relationship between perceptions with women's participation in the screening of cervical cancer with IVA method in the working area of Padangsidempuan Public Health Center ($p = 0.001$) [9].

Table 4. The Relationship of Reproductive Age Women's Family Support with IVA Examination

Family Support	IVA Examination				Total	<i>P-value</i>	OR	
	Yes		No					
	n	%	n	%				n
Yes	10	43.5	13	56.5	23	100	0.003	6.000
No	5	11.4	39	88.6	44	100		
Total	15	22.4	52	77.6	67	100		

Table 4 shows that women of childbearing age who get family support for IVA examination have 23 people and who do IVA examination on respondents who get family support as many as 10 people (43.5%) and who do not do IVA examination as many as 13 people (56.5%), while women of childbearing age who did not get family support but did IVA examination were 5 people (11.4%), and women of reproductive age who did not get family support and did not conduct IVA examination as many as 39 people 88.6%).

The result of statistic with degree of significance (α) 5%, so that p-value less than alpha value (0.05) got p-value = 0.003 meaning that there is significant relation between support of woman age family of woman with IVA examination at public health center Banjarmasin, while the Odds Ratio score of 6 means that women of child-bearing age who have family support are 6 times more likely to have early cervical cancer screening with IVA.

This study is in line with research conducted by Wiganti (2017) with the results of research that there is a significant relationship between the role of family support with decision making early detection of cervical cancer (p-value = 0.000). According to the results of research that has been done shows that family support has a significant relationship, and has an important role for women of childbearing age. With the support of the family of women of childbearing age will always maintain health, especially in the early detection of cervical cancer.

Table 5. Multivariate Analysis

No	Variable	p-value	Exp (B) (OR)	95% CI for EXP (B)	
				Lower	Upper
1	Knowledge	0.017	7.278	1.433	36.950
2	Perception	0.002	34.446	3.482	340.722
3	Family support	0.105	3.718	0.761	18.152

Based on the multivariate results obtained the value of Odd Ratio of knowledge variables of 7.278 means that women of childbearing age with good knowledge have the possibility to conduct IVA examination 7.278 times greater than women of childbearing age who have less knowledge. The result of the research indicates that the value of the knowledge variable is 0.017 which means there is the influence of knowledge on IVA examination behavior. the higher knowledge of women of childbearing age about IVA examination has also increased the behavior of IVA examination.

In the perceptual variables, the Odd Ratio of 34.446 means that women of childbearing age with positive perceptions are likely to have IVA examinations 34.446 times greater than women of childbearing age who have negative perceptions. The results showed that the value of p-value of 0.002 which means there is the influence of female perception of fertile age against IVA examination. Positive positive perceptions of women of childbearing age against IVA examination is also increasing the behavior of IVA examination. While the family support variable Odd Ratio value of 3.718 which means that women of childbearing age with supportive family support has the possibility to conduct IVA examination 3.718 times greater than women of childbearing age who do not get support from the family.

Based on the result of multivariate analysis indicate that contribution given by independent variable that is knowledge, perception and family support to dependent variable that is examination of IVA based on Summary Model table there is column (R Square) with number 0.563 meaning to find the percentage must multiply 100% that is $0.563 \times 100\% = 56,3\%$ of IVA examination action by woman of child-bearing age influenced by knowledge, perception and family support while the rest 43.7% influenced by other factors outside research variable. Variables that can be developed include the attitude, age, education and socialization of public health center. Socialization of public health center is one of promotion and preventive effort to prevent cervical cancer which can be done by the public health center. These efforts can include training of health workers to conduct IVA examination, counseling to cadres, placing posters in a public health center and giving an extension

to women of childbearing age at health facilities. Providing information to women of childbearing age in various health services especially public health center is expected to contribute to the presence of women of childbearing age to carry out IVA examinations.

IV. CONCLUSION

There is a relationship between knowledge, perception and family support in the early detection of cervical cancer examination of early detection of cervical cancer visual acetic acid inspection method in Banjarmasin Public Health Center.

REFERENCES

- [1] Information Cancer Data Center Ministry of Health and RI in PDF format; 2015.
- [2] Novel, Sinta, et al. Cervical Cancer and Human Papillomavirus Infection (HPV). Jakarta: Java media Network; 2010
- [3] Andrija. Cervical cancer. second edition .. Jakarta: Oncology Division of the Department of Obstetrics Gynecology FK - UI; 2009
- [4] World Health Organization (WHO). Comprehensive Cervical Cancer Prevention And Control: A Healthier Future For Girls and Women.Switzerland; 2013
- [5] Juan A, Desby, Hadrians Kesuma. Examination of IVA Method (Visual Inspection of Acetic Acid) for Cervical Cancer Prevention. Journal of Medicine and Health, 2 (2): 1 69-174; 2015
- [6] Oktavi ana, Maulida Nurfazriah. The relationship between perceptions of individual susceptibility, disease seriousness, benefits and barriers to the use of visual inspection screening of acetic acid in women of childbearing age. Thesis. Surakarta: Postgraduate Program Master of Public Health Sciences Sebelas Maret University. ; 2015
- [7] Arikunto, S. Research Procedures A Practice Approach. Jakarta: Rineka Cipta. ; 2011
- [8] Lyimo FS, Beran TN. Demographic, knowledge, attitudinal, and accessibility factors. Three public policy implication. BMC Public Health . 2 (12): 1-8. ; 2012
- [9] Lubis, Y. F. Influence of Perception and Motivation of Aged Women Against Cervical Cancer Screening Participation Method of Visual Inspection with Acetic Acid (IVA) in the Working Area of Sidakal Puskesmas Subdistrict of Padangsidempuan Selatan Year 2013. Thesis.Faculty of Public Health Universitas Sumatera Utara; 2015
- [10] Wiganti., Atun, Ana Zumrotun Nisak. The Role of Family Support Against Decision Making of Cervical Cancer Early Detection. Journal of Midwifery . 1 (1): 12-17; 2017