

BEHAVIOR OF VISUAL INSPECTION WITH ACETATE ACID (VIA) TEST ON WOMEN

Sri Dewi Handayani¹, Nanik Setiyawati², Dyah Noviawati Setya Arum³

¹Koba Public Health Center, Central Bangka, Bangka Belitung, Indonesia

^{2,3}Department of Midwifery, Health Polytechnic Ministry of Health Yogyakarta, Indonesia

Article Info

Article history:

Received Agt 10th, 2018

Revised Sep 26th, 2018

Accepted Oct 24th, 2018

Keyword:

VIA

Education

Knowledge

Attitude

Information access

Community health worker

support

ABSTRACT

Every year according to WHO (World Health Organization), 490.000 women in the world are diagnosed with cervical cancer. The incidence of cervical cancer can be prevented by early detection, one of which is by VIA test. However, coverage of VIA in Central Bangka in Koba District is still very low (3.25%). Knowing the factors that most influence the behavior of VIA test. This research uses an analytical survey method with a cross-sectional approach. Population in this research is women of reproductive age who are married as many as 64 respondents. Data analysis techniques use chi-square, Fisher exact test, and logistic regression. The behavior of VIA test is still low (23,4%). The result of bivariate analysis of the degree of confidence (CI) 95% obtained the significant relationship between, education (p-value =0,003), knowledge (p-value =0,000), access information (p-value =0,001), and support of community health worker s (p-value =0.001) with VIA test behavior. While age (p-value =0,637), parity (p-value =0,220), and husband / family support (p-value = 0,353. The most influential factor on VIA test behavior is community health worker support (PR =11.6 with 95% CI value (1,621-83,026)). The result of the logistic regression test obtained that together probability mother to do an examination of VIA if have higher education, got community health worker support, and supportive attitude is 22,05%. Majority of respondents are high risk aged, low education, low-risk parity, lack of knowledge, support, and access to information, get support from their husbands/families and get support from community health workers. There is a significant relationship between education, knowledge, attitudes, access to information, and community health worker support for VIA test behavior. The most influential factor in the behavior of VIA test is the support of community health workers.

Copyright © Jurnal Kesehatan Ibu dan Anak.
All rights reserved.

Corresponding Author:

Nanik Setiyawati,

Department of Midwifery, Health Polytechnic Ministry of Health Yogyakarta,

Mangkuyudan Street, MJIII/ 304, Mantrijeron, Yogyakarta, Indonesia 55143. Telp : [\(0274\) 374331](tel:0274374331)

Email: nanikyogya@gmail.com

INTRODUCTION

Cervical cancer is a type of malignant tumor that affects the surface layer (epithelium) and cervix.¹ The cause of cervical cancer is an infection of the Human Papilloma Virus (HPV). HPV is transmitted through sexual intercourse and is found in 95% of cervical cancer cases.² According to WHO (World Health Organization), 490.000 women in the world are diagnosed with cervical cancer each year and 80% are in developing countries. In Indonesia it is estimated that every day 40-45 new cases appear, 20-25 people, die, meaning every 1 hour is estimated that 1 woman dies due to cervical

cancer. This means that Indonesia will lose 600-750 women who are still productive every month.³

Lack of women's knowledge about cervical cancer causes delays in diagnosis so that patients coming in cancer conditions are advanced, weak general conditions, low socioeconomic status, limited resources, facilities, and infrastructure. In addition, the cause of the increased incidence of cervical cancer is due to a lack of effective screening programs with the aim of detecting pre-cancerous and cancerous conditions at an early stage including treatment before further invasive processes.⁴ The most effective prevention of cervical cancer is through early detection with pap smears or with Visual Acetate Acid Inspection (VIA). VIA method is an effective and efficient method to detect early cervical cancer.⁵ Screening with the VIA method is done in a very simple, inexpensive, convenient, and easy way.

Currently screening coverage for early detection of cervical cancer through VIA test is still very low at around 5%. Whereas screening coverage is effective in reducing morbidity and mortality due to cervical cancer is 85%.² Knowledge of the VIA method as early detection of cervical cancer is important in order to have the willingness and awareness to carry out VIA tests. Indonesia based on screening results in 2007 - 2014 was still low, amounting to 904.099 (2.45%), positive VIA results in as many as 44.654 people (4.94%), and cervical cancer suspects as many as 1.056 people (1,2 per 1,000 people).⁷

Behavior is still a barrier to fertile women (WUS) to carry out early detection of cervical cancer. The process of forming or changing behavior can be influenced by several factors both within individuals and outside individuals. A person's attitude can change by obtaining additional information from within his social group. The social group in question is the support of husband, family and health workers including community health workers. Changing people's attitudes and behavior towards early detection of cervical cancer can be done with an approach to health behavior.⁸ Factors related to the behavior of early detection of cervical cancer are attitudes, knowledge, and age of the mother. Information about cervical cancer and early detection can be obtained through TV, radio, brochures, leaflets, friends, family, even health workers including community health workers.⁹ Education is one of the factors that greatly influence people's behavior. The higher the level of education of a person, the easier it is for the person to receive information so that more knowledge is possessed. They will understand and understand the importance of conducting VIA tests and vice versa if public education is low, the less knowledge they have, so they will ignore and not understand the importance of health services, especially on VIA test.¹⁰

The target of early detection of cervical cancer in women with age groups above 20 years, but the target of the Early Detection Program in Indonesia is women aged 30-50 years with a target of 50% of women up to 2019.¹¹ Coverage of VIA services to fertile women in Bangka Province Belitung in 2016 was still low, which was 5.9%, while the VIA service coverage in Penyak Village was 1%.^{12,13} At the Koba Health Center and in the Penyak village health center it served VIA tests every day for free. However, the number of women participating in the program is still low. There is one village health post (Poskesdes) and one integrated service post (Posyandu) located there. In this place, has the highest number of women (79 people), one of whom suffered from cervical cancer who had never previously examined VIA.¹⁴ There were various reasons that WUS had not conducted a VIA test, namely 2 people said they did not know, 2 people felt embarrassed, 3 people felt scared, and 1 person said they did not need to do a VIA test. This study aims to determine the factors that influence the behavior of VIA test on WUS in Penyak village, Koba sub-district, Bangka Tengah district.

METHOD

This study uses a quantitative approach, with the cross-sectional study design. The sample in this study is all women (aged 15-49 years) who live in Penyak villages (64 people). This study uses a total sampling technique where sampling is based on the total population. The time of the research was carried out in June-December 2017. The research was conducted at Penyak Village, Koba Subdistrict, Central Bangka Regency, Bangka Belitung Islands Province. The independent variables in this study were age, education, parity, knowledge, attitudes, access to information, husband or family support, and community health worker support. While the dependent variable is VIA test behavior. Validity and reliability tests were carried out on the questionnaire before being used for research. Validity test was conducted using Pearson Product Moment test and reliability testing with Cronbach Alpha obtained 20 valid questions, attitude questions 8 questions, husband/family support 3 questions and valid community health worker 3 questions support. This study analyzed descriptive data, correlation analysts used chi-square and fisher, and logistic regression.

RESULT

Univariate Analysis

In this univariate analysis produces frequency distributions and percentages of each variable that exists. The variables analyzed in this study include VIA test behavior, driving factors (age, education, parity, knowledge, attitude), enabling factors (access to information), and driving factors (husband/family support, community health worker support).

Table 1. Frequency Distribution Based on VIA test Behavior, Supporting Factors, Enabling Factors, and Driving Factors

No	Variable	Frequency	Persentase
1.	Behaviour VIA test		
	Yes	15	23,4
	No	49	76,6
2.	Characteristic		
	Age		
	Low risk	29	45,3
	High risk	35	54,7
	Education		
	Higher	22	34,4
	Low	42	65,6
	Parity		
	Low risk	43	67,2
	High risk	21	32,8
	Knowledge		
	Good	25	39,4
	Less	39	60,9
	Attitude		
Positive	30	46,9	
Negative	34	53,1	
3.	Enabling Factors:		
	Access to information		
	Good	27	42,2
	Less	37	57,8
4.	Reinforcing factors		
	Husband/family's support		
	Positive	36	56,3
	Negative	28	43,8
	Community health worker support		
Positive	35	54,7	
	Positive	29	45,3

No	Variable	Frequency	Persentase
Negative			
Total		64	100,0

Based on table 1. above, it can be seen that from 64 women in the Penyak Village, Koba Subdistrict, Bangka Tengah District, in 2017 the majority did not conduct VIA tests (76.6%), in the high risk age group (54.7 %), have low education (65.6%), have a low risk parity (67.2%), have less knowledge (60.9%), have an attitude that does not support VIA test (59.4%), have access to information that is not as good as (53.1%), get support from husband / family to conduct VIA tests as much (56.3%), and get support from community health worker s as much (54.7%).

Bivariate Analysis

The bivariate analysis in this study was conducted to determine the relationship of age, education, parity, knowledge, attitudes, access to information, husband/family support and community health worker support with VIA test behavior. The results of the bivariate test in this study can be seen in the following table.

Table 2. Bivariate Analysis

No	Variable	VIA test				P value	PR (95%CI)
		Yes		No			
		f	%	f	%		
1. Predisposing Factors							
	Age						
	Low risk	6	20,7	23	79,3	0,637	0,805 (0,324-1,995)
	High risk	9	25,7	26	74,3		
	Education					0,003	3,818 (1,489-9,789)
	High	10	45,5	12	54,5		
	Low	5	11,9	37	88,1		
	Parity					0,220	0,558 (0,234-1,332)
	Low risk	8	18,6	35	81,4		
	High risk	7	33,3	14	66,7		
	Knowledge					0,002	4,290 (1,534-11,99)
	Good	11	44,0	14	56,0		
	Less	4	10,3	35	89,7		
	Attitude					0,000	7,367 (1,807-30,03)
	Positive	13	43,3	17	56,7		
	Negative	2	5,9	32	94,1		
2. Enabling Factors:							
	Access to information					0,001	5,481 (1,712-17,55)
	Good	12	44,4	15	55,6		
	Less	3	8,1	34	91,9		
3. Reinforcing factors:							
	Husband/family's support					0,353	1,556 (0,600-0,404)
	Positive	10	27,8	26	72,2		
	Negative	5	17,9	23	82,1		
	Health Community health worker 's support					0,001	11,60 (1,62-83,03)
	Positive	14	43,8	21	56,3		
	Negative	1	3,1	28	96,9		

Based on Table 2, it is known that most of the respondents who did not do VIA test were in the age group of low risk (79.3%), low education (88.1%), low risk parity (81.4%), lack of knowledge (89.7 %), being unsupportive (94.1%), lacking access to information (91.9%), not getting support from husband / family (82.1%), and not getting support from

community health workers as much (96.9%). Based on the results of the bivariate analysis, it was found that there was no significant relationship between age ($p = 0.637$), parity ($p = 0.220$), and support from husband or family ($p = 0.353$) with women of childbearing age's behavior in VIA test. The results of the analysis of the relationship of education with VIA-based examination behavior obtained the value of $p = 0.003$ ($p < 0.05$), which means that there is a significant relationship between education and WUS behavior in the VIA test. Based on the prevalence ratio (PR) test results, obtained a value of 3.818. This means that mothers who have low education, have a 3.8 times greater risk of not doing a VIA test compared to mothers who have higher education.

The results of the analysis of knowledge relations with VIA test behavior obtained the value of $p = 0.002$ ($p < 0.05$), which means that there is a significant relationship between knowledge and women of childbearing age's behavior in the VIA test. Based on the results of the PR test obtained a value of 4.290. This means that mothers who have less knowledge, have a 4.29 times greater risk of not doing a VIA test compared to mothers who have good knowledge. The results of the relationship analysis of attitudes with VIA test behavior obtained the value of $p = 0.000$ ($p < 0.05$), meaning that there was a significant relationship between attitudes and WUS behavior in the VIA test. Based on the results of the PR test obtained a value of 7.367. This means that mothers who have an unsupportive attitude, have a risk of 7.367 times more than not doing VIA test compared to mothers who have a supportive attitude.

The results of the analysis of information access relations with VIA test behavior obtained the value of $p = 0.001$ ($p < 0.05$), meaning that there was a significant relationship between access to information and women of childbearing age's behavior in the VIA test. Based on the results of the PR test obtained a value of 5.481. This means that mothers who have less access to information, have a 5.48 times greater risk of not doing a VIA test compared to mothers who have good information access. The results of the relationship analysis of community health worker support with VIA test behavior obtained the value of $p = 0.001$ ($p < 0.05$), meaning that there was a significant relationship between community health worker support and VIA test behavior at women of childbearing age's in Penyak village, Koba Subdistrict in 2017. Based on the results of the PR test, it was obtained 11.6. This means that women of childbearing age's who are not supported by community health workers, have an 11.6 times greater risk of not doing VIA tests compared to mothers who are supported by community health workers.

Multivariate Analysis

Multivariate analysis used in this study is logistic regression with the forward conditional method. Variables included in the multivariate analysis are variables that in the Bivariate analysis have $p < 0.25$, that was education, parity, knowledge, attitudes, access to information, and community health worker support. From the results of the multivariate test, it is known that the variables of parity, attitude, and access to information are not significant where the $p \text{ value} > 0.05$, thus removed from the logistic regression analysis model. The results of logistic regression analysis can be seen in the table below:

Table 3. Multivariate Analysis

Variable	B	Sig.	95% C.I	
			Lower	Upper
Education	-1,700	0,035	0,037	0,891
Health Community health worker 's support	-2,610	0,026	0,007	0,728
Attitude	-2,523	0,007	0,013	0,510
Constant	5,570	0,000	-	-

Based on the results of multivariate logistic regression analysis, the variables of education, community health worker support, and attitude together are related to VIA test behavior with a probability smaller than the value ($p < 0.05$), that was each education (0.035), community health worker support (0.026), and attitude (0.007). If the mother has a tertiary education, has the support of a community health worker, and has a supportive attitude then the probability of the mother to do a VIA test is 22.05%.

DISCUSSION

Behavior VIA test

Based on the results of the study, it was shown that the behavior of VIA test on WUS in Penyak Village, Koba Subdistrict, Bangka Tengah District showed that the majority did not conduct VIA test (76.6%). This is in line with the research conducted by Nasihah and Lorna (2013), which showed high results in mothers who did not carry out VIA (83.3%).¹⁰

VIA test can be considered as an alternative screening method in cervical lesions because it has various advantages such as adequate sensitivity and specificity, is not traumatic, simple/practical and fast and can be done by a trained midwife.¹⁵ Behavior is still a barrier to WUS in early detection of cervical cancer.¹⁶ Changing people's behavior towards early detection of cervical cancer can be done with an approach to health behavior so that its activities are inseparable from the factors that determine the behavior.¹⁷

Age

Based on the results of the study, it was found that there was no significant relationship between age and VIA test behavior in Penyak Village, Koba sub-district in 2017. This is consistent with the research conducted by Gustiana, Dewi, and Nurchayati (2014) with the results of the chi-square correlation test ($p = 0.306$).¹⁸

Age cannot be used as a benchmark for someone to prevent cervical cancer. This can be caused by ignorance, no complaints or consider the prevention of cervical cancer is not needed.¹⁹ The absence of a correlation between age and early detection behavior of cervical cancer is due to the presence of almost the same age spread between low risk (79.3%) and high (74.3%) with the behavior of respondents who did not conduct VIA tests. The younger women have sexual intercourse, the greater the likelihood of cervical cancer.²⁰ So, it is hoped that early or routinely to do VIA test as a form of early detection of cervical cancer. The older a woman is, the higher the risk of cervical cancer. Even so, that doesn't mean young women can't get cervical cancer. In fact, those who have a young age if they do not have a healthy lifestyle, they can get cervical cancer.²¹

Education

Based on the results of the study, it is known that there is a significant relationship between education and VIA test behavior ($p = 0.003$). From the PR test results obtained a value of 3.818, which means that mothers who have low education, 3.8 times greater risk of not doing VIA test compared with mothers who have higher education. This is in line

with the research conducted by Nasihah in 2013 which stated that there was a significant relationship between education and VIA test coverage ($p = 0,000$).¹⁰

Education has a relationship with a person's level of knowledge. Good health education can improve people's understanding of preventing cervical cancer.²² The higher the level of education of a person, the better their knowledge will be compared to those who are shorter in education.²³ Most respondents have a low education (elementary and junior high). A large number of respondents who had low education who did not do VIA test (88.1%) showed that most respondents were not aware of the importance of education to be a bridge in obtaining information.

Parity

Most respondents have a low risk of parity (67.2%). Based on the correlation test results with the Fisher test showed that there was no significant relationship between parity and VIA test behavior ($p = 0.2220$), whereas many as 81.4% of mothers who had low parity risk had behaviors not as much VIA test. 81.4%. This is consistent with research conducted by Pandey and Karmacharya (2017) in Nepal which states that there is no significant relationship between parity and early detection of cervical cancer ($p = 0.142$).²⁴

The absence of a significant relationship between parity and VIA test behavior is because the number of respondents in this study both those who have low risk and high risk, both has a high percentage of behavior not conducting VIA test. Although there is no significant relationship between parity and early detection behavior of cervical cancer, it can be ascertained that the higher the amount of parity in women, the higher the likelihood of contact with health workers, thereby increasing recommendations for early detection of cervical cancer.²⁴ The number of pregnancies >3 times is a prospective factor in the incidence of cervical cancer. Cervical cancer is found in women who give birth 3-5 times. A mother who gives birth frequently and has many children can cause postpartum injury and can turn into cancer cells.²⁵ Therefore it is expected that women who have high parity (> 3) should be more vigilant about how to conduct early detection routinely, one way VIA test.

Knowledge

The results showed that there was a significant relationship between knowledge with VIA test behavior ($p = 0.002$). Most mothers who have less knowledge do not conduct VIA tests (89.7%). Mothers who have less knowledge, have a 4.29 times greater risk of not doing a VIA test compared to mothers who have good knowledge. The results of this study are in line with research conducted by Yuliawati (2012) ($p = 0,000$; $PR = 2,021$); and Dewi, Suryani, and Murdani (2017) ($p = 0.007$; $OR = 28.43$), Nasihah and Lorna (2013) with chi-square test ($p = 0.000$).^{17,26}

The participation of a person in taking part in the VIA test examination is influenced by the level of one's knowledge. Someone who has a good level of knowledge is expected to be interested and really do an early detection examination of cervical cancer, especially VIA.²⁷ Increasing maternal knowledge about cervical cancer and VIA test should be done with counseling, both formally (counseling in service places health, training for health community health worker s and informally (counseling in the social gathering, recitation, *dasawisma*, and others), both by health workers and from local government.¹⁷ Providing counseling has an impact on the level of knowledge and influences decision making in conducting VIA tests.²⁸

Attitude

Based on the results of the study, it is known that there is a significant relationship between attitudes and WUS behavior in the VIA test ($p = 0,000$; $PR = 7,367$). This means

that mothers who have an unsupportive attitude, have a risk of 7.367 times more than not doing VIA test compared to mothers who have a supportive attitude. This is in line with Yuliawati's (2012) research ($p = 0,000$; $PR = 1,813$); Dewi, Suryani, and Murdani (2017) ($p = 0.014$; $OR = 28.77$); and Masturoh (2016) ($p = 0.005$).^{17, 26,29} Most of the mothers who had a non-supportive attitude did not conduct a VIA test (94.1%). This is in line with other studies that show that WUS has a lack of attitude, as many as 95.5% do not conduct VIA tests.²⁶

In this study, respondents who had an unsupportive attitude towards early detection of cervical cancer were 53.1%. Some of the reasons that make up a negative attitude are, it is not important, there is no risk of cervical cancer, there are no signs of worrying symptoms, fear of pain, shame, fear of abnormal results, estimation of the use of examination costs, and fear of not being hygienic.³⁰ It is also possible because of the motive, great curiosity, and encouragement from the family. Supportive or positive attitudes about prevention of cervical cancer are also supported by self-awareness in an effort to anticipate undesirable possibilities, which can lead to pathological or consequent complications. cervical cancer.³¹

Access of Information

Based on the results of the study, it is known that there is a significant relationship between access to information and VIA test behavior obtained the value of $p = 0.001$ ($p < 0.05$). Based on the results of the PR test obtained the value of mothers who have less information access, 5.48 times greater risk of not doing VIA test compared with mothers who have good information access. The results of the study showed that there were 57.8% of respondents who had less access to information, where most of the mothers who had less access to information did not conduct a VIA test (91.9%). This is in line with research conducted by Masturoh (2016) where access to information influences WUS behavior in VIA tests ($p = 0.029$).²⁹

The lack of community participation in the early detection of cervical cancer in Indonesia is caused by a lack of public awareness of cervical cancer and information on how to prevent and detect it dynamically.³² In addition, a lack of knowledge will affect mothers not to do VIA tests, which is possible because of the lack of getting information. Information can be received through direct officers in the form of counseling, health education, from village officials through broadcasts in *dasawisma* groups or others, through mass media, leaflets, television broadcasts, and others.¹⁷ Most mothers who get information about cervical cancer from health workers are more likely to follow early detection of cervical cancer.³³ Health workers are one of the factors driving individuals to behave. This is because health workers are experts in their field so that it is used as a place to ask questions and provide accurate health information. Submission of good information between health workers and the public can contribute positively to health behavior, namely early detection of cervical cancer.³⁴

Husband/Family's Support

Based on the results of the study, it was found that there was no relationship between husband/family support and VIA test behavior in WUS in Penyak village in 2017 ($p = 0.353$). These results are consistent with Masturoh's 2016 study, which stated that there was no correlation between husband's support and WUS behavior in VIA test at Bangetayu Health Center in Semarang City ($p = 0.222$).²⁹ Based on the results of the study it was found that 26 (72.2%) mothers get support from husband/family not do VIA tests, while as many as 23 respondents who did not get husband/family support did not conduct VIA tests were 82.1%. This can be interpreted as not necessarily that WUS with husband's support supports conducting VIA tests.

The results showed that mothers who had husband/family support had a higher percentage, as much as 56.3% compared to mothers who did not get husband/family

support (43.8%). Respondents who get support from a good family will be more likely to conduct VIA tests. This is due to the strong influence of the closest person or husband will tend to make respondents more motivated to improve their health. In addition, the role of the husband as a decision maker will greatly influence the behavior of WUS in conducting VIA tests. While respondents who get support from poor families will be less likely to have a VIA test.²⁹ If a woman does not have the closest person or group who has a good understanding of health, it will indirectly have an impact on her behavior.³³

Health Community health worker 's Support

Based on the results of the study, it was found that there was a significant relationship between community health worker support and VIA test behavior in WUS in Penyak village in 2017 ($p = 0.001$). Community health worker support is also the most influential factor in VIA test behavior at WUS in Penyak Village in 2017 ($PR = 11.6$). This means that mothers who are not supported by community health worker s have a risk of 11.6 times more than not doing VIA tests compared to mothers who are supported by community health worker s. While based on the results of multivariate it was found that together with the probability of mothers to conduct VIA test if they had higher education, got community health worker support, and supportive attitudes were 22.05%. The results of this study are in line with Yuliawati's research in 2012 that there is a significant relationship between community health worker support and VIA behavior ($p = 0,000$), and the value of $PR = 1.8$, which means that WUS who have community health worker support is more than 1.8 times more likely to conduct VIA tests compared to WUS who did not receive community health worker support.¹⁷

The results of the study obtained 21 respondents (56.3%) who received the support of community health worker s who did not conduct VIA test, while 28 respondents (96.9%) did not receive support from the community health worker. This is consistent with Susanti's (2011) study which states that the role of community health worker s is related to the low VIA visit ($p = 0.009$). The role of health community health workers is related to the low visit of VIA, because health community health worker's lack health promotion on cervical cancer and the importance of early detection of cervical cancer with VIA.³⁵ Most health community health worker s do not record who women have done early detection of cervical cancer and are less reminded of women who have not done early detection to immediately do it. According to Dewi, Nurdiamah, and Achadiyani (2013), health community health worker s are expected to be able to help disseminate the knowledge and skills they get to the wider community so that public knowledge about cervical cancer and its prevention increases.³⁶

CONCLUSIONS

Most respondents did not conduct VIA tests. The majority of respondents are of high risk, low education, low-risk parity, lack of knowledge, lack of support, lack of access to information, get support from their husbands/families and get support from community health workers. There is a significant relationship between education, knowledge, attitudes, access to information, and community health worker support for VIA test behavior. There is no relationship between age, parity and husband/family support for VIA test behavior. The most influential factor on the behavior of VIA test on women of childbearing age's in Penyak village, Koba sub-district, Central Bangka district in 2017 is the support of community health workers. The most influential factor on the behavior of VIA test on women of childbearing age's in Penyak village, Koba sub-district, Central Bangka district in 2017 is the support of community health workers. Together the probability of a mother to conduct a VIA test if she has a higher education, has the support of community health worker s, and the supportive attitude is 22.05%

SUGGESTION

Based on the results of this study, it is recommended for women of childbearing age to be more routine to early detection of cervical cancer, and to health workers to conduct counseling and training to community health workers about cervical cancer.

REFERENCE

1. Savitri, Astrid..*Kupas Tuntas Kanker Payudara, Leher Rahim, dan Rahim*. Yogyakarta: Penerbit Pustaka Baru Press, 2015.
2. Setiati, Eni. *Waspada! Kanker Ganas Pembunuh Wanita; Kanker Rahim, Kanker Indung Telur, Kanker Leher Rahim, Kanker Payudara*. Edisi 1. Jakarta : penerbit Andi. 2009.
3. Rasjidi I. Epidemiologi Kanker Serviks. *Indonesian Journal of Cancer*. 2007; 3 (3) : 103-108.
4. Depkes RI. (2010). KepMenKes RI Nomor 796/Menkes/SKVIII/2010 Tentang Pedoman Teknis Pengendalian Kanker Payudara dan Kanker Leher Rahim.
5. Aprilyta F.N. *Pengaruh Penyuluhan Kanker Serviks terhadap Tingkat Minat Pemeriksaan VIA pada Wanita Usia Subur di Dusun Jadan Tamantirto Bantul*. Skripsi. Universitas 'Aisyiyah, Yogyakarta. 2017.
6. Marliana, Yunata.*Akurasi Metode Inspeksi Visual Asam Asetat/VIA Untuk Deteksi Dini Kanker Leher Rahim*.Jurnal Kesehatan Prima Vol.8 No. 2,2014.
7. Kementerian Kesehatan RI. Deteksi Dini Kanker Leher Rahim dan Kanker Payudara di Indonesia 2007-2014. *Buletin Jendela Data dan Informasi Kesehatan*. Jakarta : Kementerian Kesehatan RI. Semester 1, 2015.
8. Rokhmawati, Ika. *Faktor yang berhubungan dengan PUS dalam deteksi dini kanker serviks dengan VIA diwilayah kerja puskesmas ngawen I kabupaten gunung kidul*. FKM UI, 2011.
9. Tarigan, Frida Lina. *Faktor-Faktor Yang Berhubungan Dengan Perilaku WUS Dalam Deteksi Dini Kanker Serviks Dikelurahan Dwikora Medan*.IKM USCM-Indonesia, 2014.
10. Nasihah, Mimiatur, dan Lorna, Sifia. *Hubungan Antara Pengetahuan Dan Pendidikan Dengan Pelaksanaan Deteksi Dini Kanker Serviks Melalui VIA*.Jurnal midpro edisi 2, 2013.
11. Kemenkes RI. *Panduan Program Nasional Gerakan pencegahan Dan Deteksi Dini Kanker Leher Rahim Dan Kanker Payudara*. Jakarta: Dirjen P2PL, 2015.
12. Dinkes Provinsi Bangka Belitung. *Laporan Cakupan Pemeriksaan VIA*, 2016.
13. Puskesmas Koba. *Buku Cacatan Pemeriksaan VIA tahun 2016*. 2016.
14. Pemerintah Desa Penyak. *Profil Desa Penyak Tahun 2016*. Penyak, 2016.
15. Suwiyoga, Ketut. *Akurasi Gineskopi dengan Bantuan Olesan Asam Asetat 5% untuk Deteksi Displasia pada Lesi Serviks*. Bali : FK Udayana. 2008.
16. Rohmawati, Ika. Faktor – faktor yang Berhubungan dengan Perilaku WUS dalam Deteksi Dini Kanker Serviks dengan Metode VIA di Wilayah Kerja Puskesmas Ngawen 1 Kabupaten Gunung Kidul Tahun 2011. *Skripsi*. Jakarta : FKM UI.
17. Yuliatwati. Faktor – faktor yang Berhubungan dengan Perilaku WUS dalam Deteksi Dini Kanker Leher Rahim Metode VIA di Wilayah Puskesmas Prembun Kabupaten Sleman Tahun 2012. *Skripsi*. Depok : Peminatan Kebidanan Komunitas, Universitas Indonesia. 2012.
18. Gustiana D, Dewi Y.I, dan Nurchayati S. Faktor – faktor yang Berhubungan dengan Perilaku Pencegahan Kanker Serviks pada Wanita Usia Subur. *Tesis, Jurnal Online Mahasiswa Program Studi Ilmu Keperawatan Universitas Riau*. 2014.
19. Dalimartha. *Deteksi Dini Kanker dan Simplisia Anti Kanker*. Jakarta : Penebar Swadaya. 2004.
20. Manuaba, Ida Bagus Gde. *Memahami Kesehatan Reproduksi Wanita*. Jakarta: EGC. 2009.

21. Arum, Sheria Puspita. *Kanker Serviks Panduan Bagi Wanita untuk Mengenal, Mencegah dan Mengobati*. Yogyakarta: Notebook. 2015.
22. Sugiarsi, S. Pendidikan Kesehatan Pada Kelompok Ibu PKK Dalam Meningkatkan Pemahaman Masyarakat Untuk Mencegah Penyakit Kanker Serviks. *Jurnal Maternal*, 4:108-12. 2011.
23. Pradono, J., Sulistyowati, N. Hubungan Antara Tingkat Pendidikan, Pengetahuan Tentang Kesehatan Lingkungan, Perilaku Hidup Sehat dengan Status Kesehatan. *Buletin Penelitian Sistem Kesehatan*. Vol. 17 No. 1 Januari 2014: 89–95. , 2013.
24. Pandey R.A & Karmacharya E. Cervical cancer screening behavior and associated factors among women of Ugrachandi Nala, Kavre, Nepal. *Eur J Med Res*. 2017. 22: 32.
25. Melva. Faktor-Faktor yang Mempengaruhi Kejadian Kanker Leher Rahim pada Penderita yang Datang. Berobat di RSUP H. Adam Malik Medan Tahun 2008. *Thesis*. Sekolah Pasca Sarjana Universitas Sumatera Utara Medan 2008. 2008.
26. Dewi N.M.S.L, Suryani N, dan Murdani P. Hubungan Tingkat Pengetahuan dan Sikap Wanita Usia Subur (WUS) dengan Pemeriksaan VIA di Puskesmas Buleleng 1. *Jurnal Magister Kedokteran Keluarga*. Vol 1, No.1, 2013 (57-66).
27. Lisminawati, Heny. Pengetahuan, Minat, dan Keikutsertaan Melakukan Tes VIA pada Perempuan Pasca Penyuluhan tentang Kanker Serviks di Desa Caturharjo Sleman Yogyakarta. *Thesis*. Universitas 'Aisyiah Yogyakarta. 2016.
28. Sukanti, S. Aticeh. Maryanah. Pendidikan kesehatan dan Deteksi Dini Kanker Serviks Melalui Inspeksi Visual Asam Asetat. *Jurnal Ilmu & Ilmu Teknologi Kesehatan*, Jilid 1, No. 1, September 2013. 18-23. (2013).
29. Masturoh, Eminia. *Faktor-faktor yang mempengaruhi wanita usia subur (WUS) dalam melakukan deteksi dini kanker serviks metode inspeksi visual asam asetat(VIA)*. UNNES, 2016.
30. Chaowawinit, W et al., (Asian Pacific Journal of Cancer Prevention, 2010). "Knowledge, Attitude and Behaviour of Bangkok Metropolitan Women Regarding Cervical Cancer Screening". *Asian Pacific Journal of Cancer Prevention* vol 17, 2016.
31. Priyaswati M, Puspitaningrum D, Rahmawati A. *Gambaran pengetahuan dan sikap tentang pencegahan kanker leher rahim pada wanita yang sudah menikah usia < 20 tahun di wilayah Kecamatan Gayamsari Kota Semarang*. 2014;40:17-19.
32. Octavia C. *Gambaran Pengetahuan Ibu Mengenai Pemeriksaan Pap Smear di Kelurahan Petisah Tengah Tahun 2009* [Karya Tulis Ilmiah]. Medan: Universitas Sumatera Utara; 2009.
33. Sarini, NKM. *Faktor-Faktor yang Berhubungan dengan Pemeriksaan Pap Smear pada Wanita Usia Subur di Desa Pacung Wilayah Kerja Puskesmas Tejakula II Kecamatan Tejakula Kabupaten Buleleng Bali Tahun 2011*. [Skripsi]. Jakarta:FKM UI; 2011.
34. Reis, N et al. *Knowledge, Behaviour, and Beliefs Related to Cervical Cancer and Screening among Turkish Women*. APJCP. 2012. 13(4) :1463-1470.
35. Susanti, Aris. *Faktor-faktor yang Berhubungan dengan Rendahnya Kunjungan VIA di Wilayah Kerja Puskesmas Halmahera Kecamatan Semarang Tahun 2011*. *Skripsi*. Jurusan Ilmu Kesehatan Masyarakat, Fakultas Ilmu Keolahragaan, Universitas Negeri Semarang, 2011.
36. Dewi, A.R., Nurdiaman, E., dan Achadiyani. *Pembentukan Kader Kesehatan Untuk Meningkatkan Pengetahuan dan Kemampuan Melakukan Deteksi Dini Kanker Yang Sering Terjadi pada Wanita di Desa Sukamanah dan Desa Cihaurkuning, Kecamatan Malangbong Kabupaten Garut*. *Jurnal Aplikasi Ipteks untuk Masyarakat*. Vol 2. No.2 November 2013 : 78 – 84.