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Behavioral analysis of childbearing age women against IVA screening using health belief model

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ABSTRAK

Latar Belakang*: Di Indonesia, kanker serviks merupakan kanker kedua terbanyak yang menyerang wanita usia subur. Skrining IVA (pemeriksaan visual asam asetat) adalah program pencegahan dan pengendalian kanker serviks dengan tujuan mendeteksi kondisi pra-kanker dan kanker secara dini. Berdasarkan fakta bahwa lebih dari 50% wanita yang terdiagnosis kanker tidak pernah diskrining.*
Tujuan*: Tujuan penelitian ini adalah untuk menjelaskan perilaku wanita usia subur terhadap skrining IVA menggunakan model kepercayaan kesehatan.*
Metode*: penelitian ini menggunakan pendekatan cross sectional, dilakukan pada bulan Oktober sampai Desember 2019. Pengumpulan data menggunakan kuesioner wawancara, wilayah geografis, pekerjaan, skrining IVA, pengetahuan dan persepsi individu menggunakan Health Belif Model pada 160 responden wanita usia subur di wilayah Puskesmas. Kabupaten Bantul, Yogyakarta. Analisis deskriptif, regresi logistik chi-square, univariat, bevariat dan multivariat.*
Hasil: *Dari 160 responden berdasarkan wilayah geografis 50% berada di kota dan dataran dan 50% di daerah pesisir dan perbukitan, 55,6% telah melakukan skrining IVA, 66,9% menganggur dan 53,1% berpengetahuan baik. Persepsi kerentanan didiagnosis dengan kanker serviks = 0,011<0,05, persepsi keselamatan = 0,023<0,05, persepsi benang = 0,015<0,05, manfaat yang dirasakan = 0,023 <0,05, hambatan yang dirasakan = 0,030<0,05 dan isyarat untuk bertindak = 0,045<0,05 pada pemeriksaan IVA. Uji Negelkerke R Square adalah 0,186 dan pengaruh variabel bebas terhadap variabel terikat adalah persepsi kerentanan = 0,028, manfaat yang dirasakan = 0,043 dan hambatan yang dirasakan = 0,050.*
Kesimpulan*: Ada hubungan antara perilaku wanita usia subur pada skrining IVA menggunakan model keyakinan kesehatan yaitu persepsi kerentanan, persepsi keselamatan, persepsi benang, manfaat yang dirasakan, hambatan yang dirasakan, isyarat untuk bertindak dengan R Square 0,186 dan variabel yang berpengaruh kerentanan yang dirasakan, manfaat yang dirasakan dan hambatan yang dirasakan.*

KATA KUNCI *: wanita usia subur; penyaringan iva; model kepercayaan kesehatan*

ABSTRACT

Background: *In Indonesia, cervical cancer is the second most common cancer that attacks women of childbearing age. VIA screening (acetic acid visual inspection) is a cervical cancer prevention and control program with the aim of detecting pre-cancerous and cancerous conditions at an early stage. Based on the fact that more than 50% of women diagnosed with cancer have never been screened.*
Objective: *the purpose of this study was to explain the behavior of women of childbearing age towards VIA screening using the health belief model.*
Methods: *the study used a cross sectional approach, conducted from October to December*

2019. Data were collected using interview questionnaires, geographic area, occupation, VIA screening, individual knowledge and perception using the Health Belif Model on 160 female respondents of childbearing age in the Puskesmas area. Bantul Regency, Yogyakarta. Descriptive analysis, chi-square logistic regression, univariate, bevariate and multivariate.
Results: *From 160 respondents, based on geographic area 50% were in cities and plains and 50% in coastal and hilly areas, 55.6% had had IVA screening, 66.9% were unemployed and 53.1% had good knowledge. Perceived susceptibility of being diagnosed with cervical cancer = 0.011<0.05, perceived saverity = 0.023<0.05, perceived thread = 0.015<0.05, perceived benefit = 0.023 <0.05, perceived barriers = 0.030<0 .05 and cues to action = 0.045<0.05 on VIA screening. The Negelkerke R Square test is 0.186 and the effect of the independent variable on the dependent variable is perceived susceptibility = 0.028, perceived benefit = 0.043 and perceived barriers = 0.050.*
Conclusion: *There is a relationship between the behavior of women of childbearing age on VIA screening using the health belief model, namely perceived susceptibility, perceived saverity, perceived thread, perceived benefits, perceived barriers, cues to action with R Square 0.186 and the influential variables are perceived susceptibility, perceived benefit and perceived barriers.*

KEYWORD : *childbearing age women; iva screening; health belief model*

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INTRODUCTION

The type of cancer that mostly attacks the Indonesian people is different in each gender. The highest incidence rate for women is breast cancer, which is 42.1 per 100,000 population with an average death rate of 17 per 100,000 population, followed by cervical cancer at 23.4 per 100,000 population with an average death rate of 13.9 per 100,000 population. The incidence of cancer in Indonesia is still not known with certainty, because no population-based cancer registration has been carried out (1).

Early detection of cervical cancer with the IVA method has been carried out by the DIY Health Office every year. Data from the Disease Control section in 2016 conducted IVA examinations in all districts/cities. The highest achievement of early detection is in Yogyakarta City (46.83%) and the least is in Bantul Regency (9.03%) with an average of 17.71% in Yogyakarta (2).

Prevention and control of breast cancer and cervical cancer in Indonesia is carried out with women aged 30-50 years. Early detection is carried out using the Clinical Breast Examination (SADANIS) method for the breast and Visual Inspection with Acetic Acid (IVA) for cervical cancer. The key to the success of cervical cancer control programs is screening followed by adequate treatment. This is based on the fact that more than 50% of women diagnosed with cancer have never been screened (1).

The low participation of cervical cancer early detection examinations with IVA tests in women of childbearing age from the results of preliminary study interviews in Bantul district is because respondents are shy, feel healthy and do not feel any complaints, this is what attracts researchers to examine it. Anggraini's research stated that the low participation was because respondents were afraid that it would be dangerous to have an examination carried

out in the interior and feel ashamed if they later tested positive for cervical cancer (3). In relation to early detection, behavior plays a very important role. There are several behavioral theories, one of which is the Health Belief Model. Health Belief Model is used to explain and predict health behavior focusing on individual attitudes and behaviors. The main concept of HBM is to predict why a person performs certain behaviors or actions to maintain, protect and control conditions by looking at several points of view (4)and prophylactic vaccination against HPV is also considered to be a factor in decreasing the prevalence of the disease. This study aimed to assess women's beliefs about cervical cancer and the Pap smear test. In addition, the relationship between cervical cancer and the social and demographic characteristics was also evaluated. Methods: A descriptive cross-sectional study was performed among Saudi women living in Riyadh in 2018. Women were randomly selected, and the total sample size was 450. A predesigned self-administered questionnaire that included the Health Belief Model scale was used to collect data. Data were analyzed using SPSS 21.0. P values < 0.05 were considered as statistically significant in this study. Results: Among the 450 participants, the Pap smear test uptake was 26% and the HPV vaccine uptake was less than 1%. A low education level and family history for cervical cancer were significantly associated with the belief of high susceptibility for developing cervical cancer (p < 0.05. To explain why the coverage of cervical cancer control programs through IVA screening in Bantul Regency is at least (9.03%) below the average in DIY 17.71%, HBM is an approach that can predict public health behaviors, especially women of childbearing age related to this phenomenon. If it is known behavior or actions related to early detection of cervical cancer with the IVA test, it is hoped that the coverage of early detection of cervical cancer can increase. In this research, the researcher conducted research on analyzing the behavior of women of childbearing age towards cervical cancer screening with the IVA method using the Health Belief Model (HBM).

The purpose of this study was to explain the behavior of women of childbearing age towards IVA screening using the Health Belief Model (HBM) in Bantul Regency.

MATERIALS AND METHODS

This research is a type of quantitative descriptive research with a cross sectional approach. This research was conducted at the Community Health Center in Bantul Regency. The population in this study were women of childbearing age (WCA) in the Bantul District Health Center. The sample in this study was WCA in the Bantul District Health Center with Inclusion criteria: WCA who live permanently in the area of the research health center, are married or have been married, are not being treated for cervical cancer, aged 15-50 years, are willing to be research respondents. Exclusion criteria: suffering from cervical cancer or other types of cancer. The sample size in this study is the number of samples used in multivariate research is 15-20 on each independent variable. The number of independent variables in this study were 8 variables, so the number of samples needed was 120-160 subjects. The research variables are: *perceived susceptibility*, *perceived threat*, *perceived benefit*, *perceived barriers*, *Cues to action*, knowledge and IVA Screening. Research instruments are the tools used in data collection. The instrument used in this study was a questionnaire containing 15 items of knowledge, tested on 20 respondents in the Bantul health center area and the health belief model instrument adopted from the research instrument conducted by Pratiwi (5). Collecting data in this study using an analytical survey. The analysis in this study used a logistic regression test. To determine the total effect using the Negelkerke test.

RESULTS AND DISCUSSION

The results of the research on Behavior Analysis of Women of Childbearing Age Against IVA Screening Using the Health Belief Model are as follows:

Univariate Analysis

Univariate test results can be seen in the following table:

Table 1. Frequency Distribution of Respondents Characteristics

Variable	Frequency (f)	Percent (%)
Geographical		
Plain or urban areas	80	50
Hilly and coastal areas	80	50
Work		
Does not work	107	66.9
Work	53	33.1
IVA		
Have you ever screened for cervical cancer using the IVA method	89	55.6
Never been screened for cervical cancer using the IVA method	71	44.4
Knowledge		
Good	85	53.1
Less	75	46.9

Data source: primary data, 2019

Based on **Table 1**, as many as 160 respondents (response rate 100%) have participated in this study. A total of 160 respondents involved in this study, geographically located in the plains or urban areas as many as 80 (50%), as many as those in hilly and coastal areas. More than half of the respondents did not work (66.9%) and 55.6% had an IVA screening. More than half of respondents 53.1% have good knowledge about IVA screening.

Based on **Table 2**, of the 160 respondents in this study, most of them did not feel the perceived susceptibility to cervical cancer, which was 81.9%, while the perceived severity was felt to be mostly serious, which was 82.5%. For the perceived threat most of them feel the threat,

Table 2. Frequency of Distribution of Individual Perception Using the Health Belief Model

Variable	Frequency (f)	Percent (%)
Perceived susceptibility/ vulnerabilities		
Strong	131	81.9
Vulnerable to be diagnosed	29	18.1
Perceived Severity		
Light	28	17.5
Serious	132	82.5
Perceived Threat		
Safety	37	23.1
Threat	123	76.9
Perceived benefits		
Low	63	39.4
Tall	97	60.6
Perceived Barriers		
Weak	109	68.1
Strong	51	31.9
Cues to action		
Negative	69	43.1
Positive	91	56.9

Data source: primary data, 2019

which is 76.9%, while the perceived benefits are mostly high, which is 60.6%, while the perceived barriers are mostly weak that is equal to 68.1% and cues to action for IVA screening are mostly positive 56.9%.

Bivariate Analysis

Analysis of the behavior of women of childbearing age towards IVA screening using the *health belief model* is as follows:

a. The relationship between *perceived susceptibility* to IVA screening

Table 3. The relationship between perceived susceptibility to IVA screening

Variable	Cervical Cancer Screening (IVA)				P
	Once		Never		
	F	%	F	%	
Perceived susceptibility/vulnerabilities					
Strong	79	60.3	52	39.7	0.011
Susceptible	10	34.5	19	65.5	

Based on **Table 3**, of the 131 respondents who did not feel that there was a susceptibility

to being diagnosed with cervical cancer, 60.3% had had an IVA screening, while 29 respondents who felt that there was a perceived susceptibility were 65.5% had never done an IVA screening. Based on Chi-Square analysis, the *ρ*-value of = 0.011 <0.05 means that there is a significant relationship between perceived susceptibility or perceived vulnerability with the behavior of women of childbearing age towards IVA screening.

b. The relationship between perceived severity of IVA screening

Table 4. The relationship between perceived severity of IVA screening

Variable	Cervical Cancer Screening (IVA)				P
	Once		Never		
	F	%	F	%	
Perceived Severity					
Light	21	75.0	7	25.0	0.023
Serious	68	51.5	64	48.5	

Based on **Table 4**, of the 132 respondents who seriously felt the severity, more than half (51.5%) had done IVA screening, while 28 respondents who felt the perceived saverity were mild, most or 75% had done IVA screening. Based on Chi-Square analysis, the *ρ*-value of = 0.023 <0.05 means that there is a significant relationship between perceived saverity with the behavior of women of childbearing age towards IVA screening.

c. The relationship between perceived threat of IVA screening

Table 5. The relationship between perceived threat of IVA screening

Variable	Cervical Cancer Screening (IVA)				P
	Once		Never		
	F	%	F	%	
Perceived Threat					
Safety	27	73.0	10	27.0	0.015
Threat	62	50.4	61	49.6	

Based on **Table 5**, out of 123 respondents who felt a *perceived threat* or risk of being diagnosed, 50.4% had done IVA screening, while 37 respondents who did not perceived threat or risk of being diagnosed, most or 73% had done IVA screening. Based on the *Chi-Square* analysis, the *ρ*-value of = 0.015 <0.05 means that there is a significant relationship between perceived threat with the behavior of women of childbearing age towards IVA screening.

d. The relationship of *perceived benefit* to IVA screening

Table 6. The relationship of *perceived benefit* to IVA screening

Variable	Cervical Cancer Screening (IVA)				P
	Once		Never		
	F	%	F	%	
Perceived benefits					
Low	42	66.7	21	33.3	0.023
High	47	48.5	50	51.5	

Based on **Table 6**, of the 97 respondents who felt the perceived benefit was high, 51.5% had never done an IVA screening, while 63 respondents who felt the benefits were low, most or 66.7% had done an IVA screening. Based on Chi-Square analysis, the *ρ*-value of = 0.023 <0.05 means that there is a significant relationship between the perceived benefits of women of childbearing age on IVA screening.

e. The relationship of perceived barriers to IVA screening

Table 7. The relationship of perceived barriers to IVA screening

Variable	Cervical Cancer Screening (IVA)				P
	Once		Never		
	F	%	F	%	
Perceived Barriers					
Weak/ Small	67	61.5	42	38.5	0.030
Strong/ Big	22	43.1	29	56.9	

Based on **Table 7**, of the 51 respondents who felt that there were strong perceived barriers, 56.9% had never done an IVA screening, while 109 respondents who felt that the barriers were weak, most or 61.5% had had an IVA screening. Based on *Chi-Square* analysis, the value of = 0.030 <0.05 means that there is a significant relationship between perceived barriers that women of childbearing age feel on IVA screening.

f. Relationship of respondent's knowledge to IVA screening

Table 8. The relationship between respondents' knowledge of IVA screening

Variable	Cervical Cancer Screening (IVA)				P
	Once		Never		
	F	%	F	%	
Knowledge					
Less	48	64.0	27	36.0	0.045
Good	41	48.2	44	51.8	

Based on **Table 8**, of the 85 respondents who have good knowledge of IVA 51.8% have never done IVA screening, while 75 respondents have less knowledge about IVA, most or 64% have done IVA screening. Based on Chi-Square analysis, the *ρ*-value of = 0.045 <0.05 means that there is a significant relationship between respondents' knowledge of IVA screening.

Multivariate Analysis

The multivariate test was used to determine the effect of the independent variable on the dependent variable. The test used is the Logistics Regression test.

Total Influence

To find out the total effect, it can be seen in the Nagelkerke Test. The following are the results of the Negelkerke R Square Test:

Table 9. Negelkerke R Square Test Results

Step	-2 Logs likelihood	Cox&Snell R Square	Nagelkerke R Square
1	195,839a	,139	,186

Based on **Table 9**, the test results Negelkerke is known to have R Square of 0.186, meaning that the overall effect of the independent variables on IVA screening is 18.6% (0.186 x 100%).

Influential Variables

To determine the effect of the independent variable on the dependent variable, if < 0.05 then Ha is accepted, meaning that the variable has a significant effect on the dependent variable can be seen in the following table:

Table 10. Effect of independent variables on the dependent variable

Variable	Sig.	OR	95% CI	
			Lower	Upper
Perceived Susceptibility	0.028	2,763	1,115	6,843
Perceived Severity	0.165	2.012	0.750	5,400
Perceived Threat	0.182	1,827	0.754	4,430
Perceived Benefits	0.043	2,071	1.023	4,194
Perceived Barriers	0.050	2.082	1,000	4,333
Knowledge	0.347	1.398	0.696	2,810

Based on **Table 10**, the influence of independent variables on the dependent variable can be concluded that the *perceived susceptibility* factor or perceived vulnerability affects IVA screening with a *ρ*-value of = 0.028. *Perceived benefit factors* affect IVA screening with a *ρ*-value of = 0.043. *Perceived barriers* factors affect IVA screening with a *ρ*-value of = 0.050.

DISCUSSION

IVA screening is the easiest, affordable and simple option for the control and prevention of morbidity and mortality in women of childbearing age related to cervical cancer. This study found that of the 160 respondents involved (response rate 100%), most (55.6%) had had an IVA screening, this finding was higher than the data reported by the disease control section DIY in 2016 an average of 17 ,71% and Bantul district 9.03% for the achievement of IVA screening(6). The difference may be because in this study the

data was collected at a meeting of health cadres who had more opportunities to obtain health information from officers, thereby increasing motivation for VIA screening. A person's perception is influenced by internal and external factors (7). External factors that affect a person's perception include family background, information obtained, knowledge and needs around, intensity, size, opposites, repetition of motion, new and familiar things or unfamiliar objects. This is in line with the results of research, which states that there is a relationship between knowledge and mother's motivation to perform a visual inspection of acetic acid (IVA), this statement also supports the results in this study which found that most (53.1%) had good knowledge of screening (8). IVA. Good knowledge about VIA screening makes it easier for respondents to understand the information and take the best attitude towards their personal health. This is in line with the results of research, which found that the higher the education level of a mother, the higher the ability of a mother to capture information that can increase knowledge and the easier it is to implement knowledge and attitudes towards VIA examinations (9). This study also found that most of these respondents did not work 107 (66.9%). According to the Central Statistics Agency, work is an economic activity carried out by a person, in an agency/office/company on a permanent basis by receiving a salary or wages in the form of money or goods. According to the results of the study, self-employed women are more likely to be screened than women who work in government (10)cervical cancer is the second most frequent cancer among women aged 15 to 44 years old. Cervical cancer screening is an effective measure to enhance the early detection of cervical cancer for prevention. However, the magnitude of cervical cancer screening is less than 1%. This study aimed to determine the influence of sociodemographic characteristics and related factors on screening. Method: A hospital-based cross-sectional study has been conducted from July to September 2017. Data have been collected using interviewer-administered questioner among 425 women (18-49 years age. Women who do not work tend to have much more flexible hours than women who work with binding hours. In this study, the respondents involved did not have a binding working time, so it was easier to arrange the time for VIA screening. Geographically, the number of respondents residing in plains and urban areas as well as hilly and coastal areas is the same, namely 50%. The results of the study geographically, women who live in rural areas are less likely to carry out early detection than women who live in urban areas. In this study, both women who live in urban and plain areas as well as coastal and hilly areas have equal participation (10)cervical cancer is the second most frequent cancer among women aged 15 to 44 years old. Cervical cancer screening is an effective measure to enhance the early detection of cervical cancer for prevention. However, the magnitude of cervical cancer screening is less than 1%. This study aimed to determine the influence of sociodemographic characteristics and related factors on screening. Method: A hospital-based cross-sectional study has been conducted from July to September 2017. Data have been collected using interviewer-administered questioner among 425 women (18-49 years age. According to one study, people's accessibility to health services is influenced by multidimensional factors, not only supply and demand factors but also geographical conditions. In this study, geographical location is not a problem for respondents or the community to access health facilities, accessibility is very adequate (11). Facilities and infrastructure such as transportation and road conditions to health facilities in Bantul Regency are very adequate, making it easier for the community to reach them.

The results for individual perceptions of 160 respondents in this study mostly (81.9%), did not feel the perceived susceptibility of cervical cancer,

perceived susceptibility is the individual's belief about himself or herself for the risk of a disease on him which encourages people to adopt more behavior. healthy with VIA screening. 82.5% seriously felt the perceived saverity. Perceived saverity is an individual's belief in the severity of a disease or cervical cancer. Perceived saverity of a disease is often based on information or knowledge or the impact of the disease on his life. For perceived threat, the majority (76.9%) felt by respondents, perceived threat is an individual's belief to take action or prevent a disease that is likely to occur and its severity, the greater the perceived threat, the more likely it is to engage in behavior to reduce threats with VIA screening. While the perceived benefit is high, which is 60.6%, perceived benefit is the belief in the perceived benefits of IVA screening on the individual if he does, the construction of perceived benefit is an opinion about the usefulness of IVA screening in determining the risk of disease. In this study, it was found that perceived barriers were mostly weak, namely 68.1%, perceived barriers were negative aspects of the individual that prevented individuals from screening IVA, construction of perceived barriers were perceived barriers to screening IVA. Cues to action for conducting VIA examinations were mostly positive 56.9%. Cues to action is confidence in the ability to do something or screening IVA. Generally people are willing to do or not try to do something new or an IVA screening, unless they think they can do it. A person who believes a new behavior is beneficial (perceived benefit) but does not think they are capable of doing it (perceived barriers) may not try. According to the perception of behavioral control is the presence or absence of the necessary resources and opportunities, the individual's perception of the ease or difficulty of engaging in attractive behavior. Individuals have control over behavior and have confidence to control behavior. The extent to which an individual feels capable of performing a certain behavior and the extent to which the individual feels that the behavior is under his control. The degree of anticipated ease or difficulty in developing an intention to perform a particular behavior and confidence in the ability to perform a particular behavior (12).

This study also found a significant relationship between perceived susceptibility and VIA screening. The results showed that 131 respondents who did not feel 60.3% perceived susceptibility had done VIA screening, while 29 respondents who felt 65.5% perceived susceptibility had never done IVA screening, based on Chi-Square analysis obtained the value of = 0.011 <0.05 . The results of research, said that there was a perception of vulnerability and the use of VCT (5). Pregnant women who have a high perception of vulnerability to HIV/AIDS will increase the use of VCT. A research, says that there is a relationship between perceptions of increased disease susceptibility, then health services in the Health Belief Model will increase. This is in accordance with the results of the study which stated that there was a relationship between the perceived vulnerability of women of childbearing age and the behavior of early detection of cervical cancer using the IVA method (5).

There is a significant relationship between perceived saverity and VIA screening. The results show that from 132 serious respondents who felt that 51.5% had done IVA screening, while 28 respondents felt that the perceived saverity was mild, most or 75% had done IVA screening, based on Chi-Square analysis, the value of = 0.023 <0.05 . The results of this study are in line with the research, which said that there was an influence between the perception of severity and performing the IVA test for early detection of cervical cancer (13). According to research, which revealed that there was an influence on the perception of severity and HIV testing, mothers who had the perception that serious illnesses were detected

earlier would take preventive measures, one of which was HIV testing to determine whether or not they had AIDS. In the study, it was revealed that there was a relationship between perceived severity and use of VCT. Pregnant women who have a high perception of the severity of HIV AIDS will increase the use of VCT. The results of this study are relevant to the theory of the Health Belief Model. Perceived severity determines whether there is prevention of disease. The perception of severity is often based on medical information, knowledge or a person's belief that he or she will get into trouble due to an illness that will complicate his or her life. The results of this study are supported, that the purpose of conducting the IVA test is due to the severity of cervical cancer. The HBM theory developed, states that the perception of the seriousness or severity of a disease causes a person to have an attitude to take a treatment, predicts that an individual will take action to protect themselves if they consider that a person's condition is in serious trouble (5). The existence of a perception or assumption about the severity of a disease in this case is cervical cancer, makes individuals willing to undergo an examination using the IVA test method, this is because they do not want to be exposed to a serious disease so they will make efforts to prevent the occurrence of the disease.

There is a significant relationship between perceived threat and VIA screening. A total of 123 respondents felt that there was a perceived threat and 50.4% had had an IVA screening, while 37 respondents who did not feel a perceived threat were affected, most or 73% had done an IVA screening, the results of the Chi-Square analysis obtained a value of = 0.015<0 ,05. This is in accordance with the results of the study, which said that there was an influence between the perception of threat and the implementation of the IVA test. Women who have the perception that cervical cancer is a threatening disease will carry out an IVA test. This study shows that women who have a perceived threat that cervical cancer can be prevented by VIA screening are diseases that threaten to take preventive action using VIA screening (5). The more severe the risk of a disease, the greater the likelihood that the individual will develop the disease and the greater the perceived threat. This threat encourages individuals to take action to prevent or cure disease.

This study also found that there was a significant relationship between perceived benefits and VIA screening. A total of 97 respondents felt that 51.5% of perceived benefits had never done IVA screening, while 63 respondents who felt little or low perceived benefit, most (66.7%) had done IVA screening, based on the results of Chi-Square analysis, the value of = 0.023 < 0.05. This is in accordance with the research, which states that there is an influence on the perception of benefits and the implementation of the IVA test. Women who increasingly feel the perception of the benefits of an action to avoid the disease, will prefer to take the IVA test. This means that the more you feel the benefits of an action to avoid disease, the more you will choose to take that action. This is supported by the HBM theory developed, that the higher the effectiveness of the level of confidence in the strategy designed to reduce the threat of a disease, the higher the risk of a disease, the higher the risk of taking preventive action, in this case the IVA test. Perceived benefits are beliefs or understandings about the perceived benefits of the actions taken. Perceived benefit emphasizes the benefits that will be obtained if the client takes an action (5).

There is a significant relationship between perceived barriers and IVA screening, of 51 respondents who feel that perceived barriers are strong or large, 56.9% have never done an IVA screening, while 109 respondents who feel that perceived barriers are weak or small, most

or 61.5% have perform VIA screening, based on Chi-Square analysis, the value of = 0.030 <0.05 was obtained. The results of the study, said that there was an influence on the perception of barriers and the implementation of the IVA test. Women who had the perception of large obstacles in carrying out behavior, the success of behavior in carrying out the IVA test, the success of the IVA test behavior was getting smaller. The results of this study are in accordance with the theory of the Health Belief Model, in taking action to prevent a disease or seek treatment is influenced by perceived barriers, namely obstacles that arise in taking an action. The general obstacles experienced by a person in determining health actions or utilizing health services are dominated by personal constraints. Perceived barriers are a determining element for behavior change or not (5).

This study found a relationship between respondents' knowledge and VIA screening. 85 respondents who have good knowledge of VIA 51.8% have never done VIA screening, while 75 respondents have less knowledge about VIA, most (64%) have done VIA screening, based on Chi-Square analysis, the value of = 0.045<0.05. The results of this study are in accordance with the theory, which says that knowledge is the result of human knowing about something or all human actions to understand an object it faces or the result of human efforts to understand a certain object (5). Sources of knowledge are beliefs based on tradition, customs and religion, the five senses/ experience, reason and intuition. In a research, showed that most of the respondents did not have knowledge about the signs and symptoms of cervical cancer, had less cervical cancer screening practices (9).

The influence of the independent variable on the dependent variable in this study is shown from the results of the Negelkerke test. The effect of the independent variable on the dependent variable from the test results, it is known that the R Square is 0.186, meaning that the overall effect of the independent variable on the VIA screening is 18.6% (0.186 x 100%). While the influence of independent variables on the dependent variable, it can be concluded that the perceived susceptibility factor has an effect on VIA screening with a value of = 0.028, the perceived benefit factor has an effect on VIA screening with a value of = 0.043 and the perceived barriers factor affecting the VIA screening. with a value of = 0.050.

CONCLUSION AND RECOMMENDATION

This study aims to analyze the behavior of women of childbearing age towards VIA screening using the Health Belief Model. In this study, it was found that there was a relationship between the behavior of women of childbearing age on VIA screening using the health belief model, namely on perceived susceptibility, perceived saverity, perceived thread, perceived benefit, perceived barriers, cues to action and it was known that R Square was 0.186, meaning that the overall effect of independent variables on VIA screening was found. by 18.6% (0.186 x 100%). Variables that have a significant effect are perceived susceptibility or perceived vulnerability to IVA screening with a value of = 0.028, perceived benefits or perceived benefits affect VIA screening with a value of = 0.043, perceived barriers or perceived barriers affect VIA screening with a value of = 0.050. For the Health Office, it is necessary to increase socialization and counseling about the importance of screening IVA (visual inspection of acetic acid) to the public in order to increase understanding and raise awareness so that the level of community participation will be higher. For health education institutions, especially in the Special Region of Yogyakarta in order to optimize and increase cooperation with the local Health Office in direct involvement in providing counseling related to IVA screening through community service activities programs.

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