

<http://heanoti.com/index.php/hn>



## RESEARCH ARTICLE

URL of this article: <http://heanoti.com/index.php/hn/article/view/hn20605>

# Perceived Susceptibility and Perceived Benefit as Factors Affecting VIA Tests Participation in Work Area of Kertosari Health Center

Kurnia Nata Pratiwi<sup>1(CA)</sup>, Sri Hernawati<sup>2</sup>, Dewi Rohkmah<sup>3</sup>

<sup>1(CA)</sup>Postgraduate School of Public Health Sciences, University of Jember, Indonesia; kurnianata24@gmail.com  
(Corresponding Author)

<sup>2</sup>Faculty of Dentistry, University of Jember, Indonesia

<sup>3</sup>Faculty of Public Health, University of Jember, Indonesia

## ABSTRACT

In Indonesia, cervical cancer is ranked first as the cause of death to women. The government has implemented an early detection program of cervical cancer in controlling cervical cancer by using Visual Inspection with Acetic Acid (VIA). Indonesian women's awareness to perform early detection is still very low with coverage of early detection of cervical cancer which is less than 5%. The Health Belief Model (HBM) is used to forecast health enhancement behavior that is based on individual behavior determined by the individual's motives and beliefs. The purpose of this study was to analyze the effect of Health Belief Model (HBM) which included perceived of susceptibility, perceived of severity, perceived of benefits, perceived of threats, perceived of barriers and cues to act on VIA test participation. This type of research was observational analytics. The design used was case control. The sample in this study were 64 cases and 64 controls, selected by purposive sampling. Data were analyzed using Partial Least Square (PLS). Based on the result of research, there was an influence of perceived of susceptibility on participation with  $t$  value = 4.417 ( $>1.96$ ). Perceived of benefit affected participation with  $t$  value = 11.647 ( $>1.96$ ).

**Keywords:** Perceived susceptibility, Perceived severity, Perceived threat, Perceived benefit, Perceived barrier, Cues to action, VIA test

## INTRODUCTION

Visual Acid Inspection method (IVA) is a method that uses 3-5% acetic acid solution in the cervix and sees the color change that occurs after the smear, a positive result in precancerous lesions seen in a white spot color called Aceto white epithelium. Cervical cancer is a disorder that occurs in the body cells, in this case cervical cells, which develop rapidly and uncontrolled<sup>(1)</sup>. World Health Organization estimates in 2010 that there are 500,000 cases of cervical cancer in the world and Indonesia is the country with the second most cervical cancer cases after China<sup>(2)</sup>.

The coverage of early cervical cancer detection programs of at least 80% can significantly decrease the morbidity and mortality of cervical cancer. Indonesian women's awareness to do early detection is still very low, with the coverage of early detection of cervical cancer less than 5%<sup>(3)</sup>. The Health Belief Model (HBM) is often considered a major framework in behavior related to human health and has encouraged health behavior research since 1950. States the Health Belief Model (HBM) is used to forecast health enhancement behavior that is based on individual behavior which is determined by the individual's motives and beliefs. Components in HBM are perceived susceptibility, perceived seriousness, perceived threat, perceived benefits, perceived barriers and cues to action<sup>(4)</sup>.

The purpose of the study was to analyze the effect of perceived susceptibility and perceived benefit on participation to VIA test.

## METHODS

This research was conducted at Work Area of Kertosari Health Center at May 2018. This type of research was observational analytics. The design used in this research was case control study. The population in this study was all women of childbearing age (30-49 years)<sup>(5)</sup> who was VIA test participation in the work area of Kertosari Health Center. The sample in this research was 64 case respondents and 64 respondents control, selected using purposive sampling, based on a certain consideration that focuses on a particular purpose<sup>(6)</sup>. Variables in this study

included perceived susceptibility, perceived severity, perceived threat, perceived benefit, perceived barrier, and cues to action. Data were collected using questionnaires, then analyzed using Partial Least Square (PLS).

**RESULTS**

**Measurement Model (Outer Model)**

Table 1. Convergent validity test results

Construct	Outer loading	Note
Perceived Susceptibility	0.991	Significant
	0.992	Significant
	0.994	Significant
	0.994	Significant
	0.992	Significant
Perceived Benefit	0.997	Significant
	0.998	Significant
	0.998	Significant
	0.998	Significant
	0.995	Significant
VIA test Participation	1.000	Significant

Table 1 shows that all values on question items are above the value of 0.50, so there was no convergent validity problem in the model under test.

Table 2. Composite reliability test results

Variabel	Composite reliability	Note
Participation	1.000	Reliable
Susceptibility	0.997	Reliable
Benefit	0.999	Reliable

Table 2 shows that the composite reliability test results show satisfactory results because all latent variables had values >0.60. This means that the construct has good reliability, or the questionnaires used in this study were consistent.

**Structural Model (Inner Model) Evaluation**

Table 3. R-Square test result

Variable	R Square
Threat	0.999
Participation	0.999

Table 4. Path Coefficient

	Original sample (O)	T statistics ( O/STDEV )	P-values
Benefit →Participation	0.813	11.647	0.000
Susceptibility →Participation	0.553	4.396	0.000

Table 4 shows the effect of perceived susceptibility on the participation of VIA test with t-value of 4.396 (>1.96). Perceived benefit affects the participation of VIA tests with t-value of 11.647 (>1.96).

**DISCUSSION**

The result of this study indicates that there is influence of perceived susceptibility to the participation of VIA tests where a person realizes that she is vulnerable or susceptible to a disease, cervical cancer, then she will make an attempt to prevent the occurrence of the disease by performing VIA tests. According to Rosenstock (1980) perceived susceptibility is a subjective perception of a person from the risk of contracting the disease. In order for someone to take preventive action or treatment, because someone feels vulnerable to the disease. This makes the model of health trust dependent on individual perceptions. In connection with the evaluation of the use

of the service whether it receives consequent to medical and clinical services and face social conditions. The results of this study is supported by Winkjosastro (2005) that one of someone's goal to perform an initial examination or VIA test is to avoid the cervical cancer. An individual will take action to protect themselves if they consider that their condition is susceptible to serious conditions or problems<sup>(7)</sup>. Individuals who have high perceptions of susceptibility to cervical cancer disease then the individual will feel threatened and make efforts to prevent the occurrence of cervical cancer. One of them is by doing an VIA test.

The results showed that there was an influence between the perceived benefits to VIA test participation. This means that the more feeling the benefits of an action to avoid disease, the more it would prefer to perform such actions. This is supported by the theory of HBM developed by Rosenstock (1994) that the effectiveness of the degree of confidence in strategies designed to reduce the threat of a disease is higher. Then it will take such precautions by performing VIA tests. The more they know the benefits of cervical examination is the more they perform the examination. The benefit of performing an IVA examination is to know or detect any abnormalities in the cervix immediately upon examination so that an immediate treatment<sup>(8)</sup> may be performed. There are several benefits of a person doing an IVA examination such as to immediately get cervical cancer at an early stage, to detect early changes in cervical cells that can lead to cervical cancer a few years later, early treatment can be done to avoid cervical cancer, so treatment is expected to work better. from the description above, knowing the benefits of a method of examination or VIA test then the individual will be more interested and more aware about the importance of VIA test and will not think twice to do the VIA test<sup>(9)</sup>.

### CONCLUSION

Based on the result of research, there is influence between perceived susceptibility and perceived benefit to VIA test participation. Someone's belief about the perception of susceptibility to disease and their perception of the benefits of disease prevention will foster a sense of confidence to perform early detection of cervical cancer by IVA method.

### REFERENCES

1. Rasjidi I. Early Detection & Cancer Prevention in Women. Jakarta: Sagung Seto; 2010.
2. Putu NL. Factors Associated with IVA Examination in Women Sex Workers in Sunan Kuning Localization Work Area of Lebdosari Health Center, Semarang City. Ungaran: Fakultas Keperawatan Universitas Ngudi Waluyo Ungaran; 2017.
3. Kemenkes RI. Technical Guidelines for Breast Cancer Control and Cervical Cancer. Jakarta: Kemenkes Republik Indonesia; 2013.
4. Glanz K, Rimer BK, Viswanath K. Health Behavior and Health Education. Fourth Ed. San Francisco: Jossey Bass; 2002.
5. Depkes RI. Screening for Cervical Cancer with the Method of Visual Inspection with Acetic Acid (VIA). Jakarta: Agency for Basic Health Research and Development; 2015.
6. Notoatmodjo S. Health Research Methodology. Jakarta: Rineka Cipta; 2012.
7. Glanz K, Rimer BK, Viswanath K. Health Behavior and Health Education. Fourth Ed. San Francisco: Jossey Bass; 2002.
8. Conner M, Norman P. Predicting Health Behavior. London: Open University Press; 2005.
9. Indrian P. Relation Perception of Disease Vulnerability and Seriousness of Disease with Health Service at Health Belief Model. Surakarta: Univeritas Sebelas Maret; 2014.