

## The Relationship Between The Level of Knowledge, and Motivation of Women of Childbearing Age in Visual Inspection with Acetic Acid (VIA) Examination in The Working Area of The Rawamerta Health Center

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### ABSTRACT

Mortality from cervical cancer in Indonesia is getting higher because more than 70% of cases that come to the hospital are at an advanced stage. This phenomenon is due to the low coverage of early detection of cervical cancer including PAP smear tests and visual inspection with acetic acid (VIA). The purpose of this study was to determine the relationship between the level of knowledge, and motivation of women of childbearing age in the examination of visual inspection with acetic acid (VIA) in the working area of the rawamerta health center. This study is an observational analytic correlation with a cross-sectional research design. The research location was at the Rawamerta Health Center which is the working area of the Rawamerta Health Center, Karawang Regency. The sample in this study was taken from the total population with the Total Sampling technique, which was 137 people. Research samples were taken and met the inclusion criteria and exclusion criteria. The type of data collected is primary and secondary data. Data analysis used univariate and bivariate analysis with the contingency coefficient test at a significance level of 0.05. And the results of the analysis using the chi-square test statistics by assessing the relationship between the motivation of women of childbearing age in VIA screening showed an Asymp.sign value of 0.00, because the p-value of 0.00 < 0.05, it can be concluded that there is a relationship between knowledge and motivation of women of childbearing age by performing VIA screening. It is expected that health workers can conduct health counseling and provide support to women of childbearing age in the working area of the rawamerta health center in order to increase the motivation for VIA screening.

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### 1. INTRODUCTION

Cervical cancer is the third leading cause of death in Indonesia, with new cases increasing every year. The mortality rate by cervical cancer in 2020 is nine percent. This high mortality rate is due to 70% of cases encountered at an advanced stage. Cervical cancer can be detected by the Visual Inspection with Acetic Acid (VIA) method, the cervical cancer early detection program in Indonesia has been ongoing since 2008. One of the methods used is Visual Inspection with Acetic Acid (VIA) [1].

The number of deaths from cervical cancer in Indonesia is getting higher because more than 70% of cases that come to the hospital are at an advanced stage. This phenomenon is due to the low coverage of early detection of cervical cancer including PAP smear tests and Visual Inspection with Acetic Acid (VIA) [2].

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According to the World Health Organization (WHO), almost all cases of cervical cancer (99%) are associated with HPV (Human Papilloma Viruses) infection, which is very commonly transmitted through sexual contact. Cervical cancer is the fourth most common cancer in women, in 2018, an estimated 570,000 women were diagnosed with cervical cancer worldwide and about 31,000 women died from the disease [3]. Data from GLOBOCAN (Global cancer observatory) 2020 states that there are 36,633 (9.2%) new cases of cervical cancer in Indonesia [4]. Based on the Ministry of Health of the Republic of Indonesia, it is stated that the incidence rate of cancer in Indonesia is ranked 8th in Southeast Asia, while in Asia it is 23rd. The incidence rate of cervical cancer in Indonesia is 23.4 per 100,000 population with an average mortality of 13.9 per 100,000 population [5].

The VIA test is one way of early detection of cervical cancer which has advantages, namely the simplicity of the technique compared to PAP Smear and the ability to provide immediate results, early detection of Visual Inspection with Acetic Acid (VIA) obtains results that can be known immediately and at low cost can be reached by the community and has high sensitivity which is an important factor of a test [5].

VIA participation is one form of action or action in the form of VIA screening. Many things that influence a person to do something or act, one of which is the desire or motivation. Actions or actions that are driven by the desires contained in a person are the definition of motivation [6].

Based on data from DINKES Karawang, early detection of uterine cancer in women of childbearing age aged 30-50 years is a pilot project of 395,354 people. as for those who must be screened as much as 50% of the number of women of childbearing age 30-50 years, until now Karawang district has screened approximately 18,699 people with the number that should be checked women of childbearing age 30-50 years (26.01%). There are still many women of childbearing age 30-50 years who have not been examined by VIA, thus the need to increase public awareness to want to be examined by VIA in order to reduce morbidity and mortality rates of women from the dangers of cervical cancer. The lack of awareness of the Indonesian people, especially women, about cancer has led to low rates of early detection of cancer by women [7].

It is known that the VIA screening that has been carried out in early 2022 to date at the Rawamerta Health Center is 37% of 6971 couples of childbearing age. However, there are still many who have not been examined due to the lack of public awareness regarding early detection of cancer in women of childbearing age which causes cervical cancer.

VIA participation is a form of action or action in the form of an VIA screening. Many things that influence a person to do something or act, one of which is the presence of desire or motivation. Action or action that is driven by the desire contained in a person is the definition of motivation [6]. There are several studies related to motivation which state that there is an effect of extrinsic motivation on housewives who perform VIA screening. Other studies state that there are several levels of motivation ranging from low, medium and even high from participants who perform VIA screening [8]. and the better the motivation of women of childbearing age the more they participate in VIA screening, but there are also those who state that most of those who perform VIA screening are mothers with weak motivation [9].

Based on the above problems, this study aims to evaluate the results of VIA screening and determine the level of knowledge, and motivation in women of childbearing age towards VIA screening in the working area of the Rawamerta Health Center.

## 2. METHOD

Correlation analytic observational research method with cross-sectional research design. The research location was at the Rawamerta Health Center which is the working area of the Rawamerta Health Center, Karawang Regency. The population used in this study were all mothers of childbearing age couples who resided in the working area of the Puskesmas, totaling 137 people. The sample in this study was taken from the total population with the Total Sampling

technique, which was 137 people. Research samples were taken and met the inclusion criteria and exclusion criteria including inclusion criteria, namely 1) Fertile age couples aged 30-50 years. 2) Fertile age couples who live in the working area of the Rawamerta Health Center 3) Can read and write. While the exclusion criteria in this study are: 1) Having a cancerous malignancy condition. 2) Not willing to be a research respondent. 3) Data collection instruments using questionnaires, the type of data collected in the form of primary and secondary data. Data analysis used univariate and bivariate analysis with the contingency coefficient test at a significance level of 0.05.

### 3. RESULTS AND DISCUSSION

#### Results

Table 1. Frequency Distribution of Respondents in the Working Area of the Rawamerta Health Center

Respondent Characteristics	F	%
<b>Age</b>		
< 20 years	43	31,4%
21-35 years	42	30,7 %
> 35 years	52	38,0%
<b>Education</b>		
Elementary School / Junior High School	24	17,5 %
Senior High School	50	38,5 %
Diploma III	35	25,5 %
Bachelor's Degree	28	20,4%
<b>Job status</b>		
work	39	28,5 %
Doesn't work	98	71,5 %

Based on the data in Table 1, it can be seen from the frequency distribution based on the age of the majority of age > 35 years, totaling 52 people (38.0%), the majority of mothers' education is Elementary School / Junior High School, totaling 50 people (38.5%), the majority of mothers' job status is not working, totaling 98 people (71.5%).

Table 2. Characteristics of VIA Testing in the Rawamerta Health Center Working Area

VIA Screening	Total number of women of childbearing age	Percentages %
Yes	26	28,5 %
No	111	71,5%
Total	137	100 %

Based on Table 2, it can be seen that mothers who did not perform VIA screening had a greater proportion of 111 people (71.5%) while mothers who had performed VIA screening had a small proportion of 26 people (28.5%).

Table 3. Characteristics of Knowledge Level in the Working Area of Rawamerta Health Center

Knowledge Level	Total number of women of childbearing age	Percentages %
Good	25	18,2 %
Enough	76	55,5 %
Less	36	26,3 %

Total 137 100 %

Based on Table 3, it can be seen that mothers who have enough level of knowledge have greater proportion of 76 people (55.5%), mothers who have less level of knowledge are 36 people (26.3%) and a smaller level of good knowledge is 25 people (18.2%).

Table 4. Motivation Characteristics in the Rawamerta Health Center Working Area

Motivations	Total number of women of childbearing age	Percentages %
High	0	0 %
Medium	43	31,4 %
Low	94	68,6 %
Total	137	100 %

Based on Table 4, it can be seen that mothers have low motivation in a larger proportion, namely 94 people (68.6%) while medium motivation is smaller, namely 43 people (31.4%).

Table 5. Relationship between the level of knowledge of women of childbearing age in Visual Inspection with Acetic Acid (VIA) in the Rawamerta Health Center Working Area

Knowledge Level	Have had an VIA screening				Total		Asymp.sign (2 – sided)
	Yes		No				
	f	%	f	%	f	%	
Good	19	13,9 %	6	4,4 %	25	14,3 %	<b>0,000</b>
Enough	5	3,6 %	71	51,8 %	76	54,3 %	
Less	2	1,5 %	34	24,8 %	36	31,4 %	
Total	26	19,0 %	111	81,0 %	137	100%	

In table 5, the results of the analysis using the chy-square test statistics by assessing the relationship between the level of knowledge of women of childbearing age in VIA screening, it can be seen that the Asymp.sign value is 0.00, because the p-value is 0.00 <0.05, it can be concluded that there is a relationship between the level of knowledge of women of childbearing age and conducting VIA screening.

Table 6. Relationship Between the Motivation of Women of Childbearing Age to screening Visual Inspection with Acetic Acid (VIA) in the Working Area of the Rawamerta Health Center

Motivations	Have had an VIA screening				Total		Asymp.sign (2 – sided)
	Yes		No				
	f	%	F	%	f	%	
Medium	19	13,9%	24	17,5 %	43	31,4 %	<b>0,000</b>
Low	7	9,1 %	87	63,5 %	94	68,6%	
Total	26	19,0 %	111	81,0 %	137	100%	

In table 6, the results of the analysis using the chy-square test statistics by assessing the relationship between the motivation of women of childbearing age in VIA screening, it can be seen that the Asymp.sign value is 0.00, because the p-value is 0.00 <0.05, it can be concluded that there is a relationship between the motivation of women of childbearing age with conducting VIA screening.

## Discussion

### **The relationship between the level of knowledge of women of childbearing age in Visual Inspection with Acetic Acid (VIA) in the working area of the Rawamerta Health Center.**

It can be seen that mothers who have enough level of knowledge have a greater proportion of 76 people (55.5%), mothers who have less level of knowledge are 36 people (26.3%) and a smaller level of good knowledge is 25 people (18.2%). There is a relationship between the level of knowledge of women of childbearing age with performing VIA screening seen Asymp.sign value of 0.00, because p-value  $0.00 < 0.05$ . This study is in line with previous research consisting of several of them, namely according to Eka Safitri's research the research was conducted descriptive correlative with a cross sectional approach. The sample in the study was 80 women of childbearing age . Data analysis using the Chi Square correlation test shows that statistically there is a relationship between the level of knowledge about cervical cancer and the motivation to perform VIA screening in women of childbearing age [10].

In the study found the results of the majority knowledge level is sufficient so that according to the assumption of researchers in increasing the knowledge of women of childbearing age there is a need for the implementation of health counseling about cervical cancer and VIA screening, this is in line with the research theory of Wati, et al. states that there is a significant difference between the knowledge of women of childbearing age before and after being given health education with a value of  $p = 0.0001$  ( $\alpha = 0.05$ ) so that technological developments, health education by current personnel becomes a source of information or knowledge that can make it easier for everyone to get information, and someone whose education level is minimal can access information about everything, including information about cervical cancer [11].

As according to the theory of Notoatmodjo, which states that one's behavior can be influenced by one's knowledge. A person's knowledge can be given according to the achievement of targets by increasing the self-awareness of women of childbearing age to perform VIA screening. Knowledge can be given in various ways such as health promotion or health counseling, the existence of disseminating information through internet media or print media where information can be understood by women of childbearing age [12].

In the modern era that already uses the media on the internet, even the access to information is very easy and the majority already have an android cellphone (HP) which makes it very easy to use internet media access. This is supported by Mulyani et al. which states that online educational media can have an impact on increasing understanding and changing one's behavior, as for the factors that influence the success of online socialization, namely individual factors, presentation of video and leaflet material, selection of words used, visualization on leaflet media and video and audio used on video media [13].

Based on previous research and theories that have explained that a person's level of knowledge is very necessary to be given the aim that behavior can change with knowledge about cervical cancer and VIA. Therefore, researchers argue that achieving the number of women of childbearing age in conducting VIA screening requires health workers who can work with several agencies related to the VIA implementation program so that health workers can focus on the target by providing knowledge that is in accordance with the current modern era.

### **The relationship between the level of knowledge of women of childbearing age in Visual Inspection with Acetic Acid (VIA) in the working area of the Rawamerta Health Center.**

It can be seen that mothers have low motivation in a larger proportion, namely 94 people (68.6%) while medium motivation is smaller, namely 43 people (31.4%) and a smaller level of good knowledge, namely 25 people (18.2%). There is a relationship between the motivation of women of childbearing age with performing VIA screening seen Asymp.sign value of 0.00, because p-value  $0.00 < 0.05$ .

This study is in line with previous research consisting of several of them, namely Manullang & Melati's research which states the results of the study found there is a relationship between motivation and early detection of cervical cancer in VIA screening with a p value = 0.001 ( $<0.05$ ) [8].

According to research by Suartini et al. the results showed that there was a significant relationship between the level of motivation and the participation of VIA screening ( $p = 0.01$ ). Based on the results of this study, it can be seen that there is an influence of one's motivation on VIA screening [14].

According to research by Jufrizen which states that motivation is one of the things that affects human behavior, motivation is also referred to as a driver, desire, supporter or needs that can make a person excited and motivated to reduce and fulfill their own impulses, so that they can act and act in certain ways that will lead to optimal direction [15].

According to the researcher's assumption, the motivation that is still lacking in this study is due to the fear of VIA screening, seen from the knowledge obtained sufficient knowledge, meaning that women of childbearing age already know about cervical cancer and VIA screening, but the VIA screening is still lacking. This is supported by research by Sari et al. which states that most respondents do not have the interest and willingness to do an VIA so that the need for the importance of health to protect the reproductive organs (cervix) is also still lacking, therefore the urge to seek information and do an VIA is also lacking and when socialization activities from cadres or health workers are still rarely emphasized about how important early detection of cervical cancer (VIA or pap smear) can prevent or find out earlier the cancer [16].

As for the assumptions of researchers, motivation can be influenced internally and externally. internally can be supported by husband or family and externally can be influenced by the support of health workers by means of the need for assistance from health workers by approaching women of childbearing age so that there is a change in behavior in conducting VIA screening.

The researcher's opinion is supported by previous researchers, namely according to Umami, who stated that the results of the author's research found that most women of childbearing age had never performed an VIA screening, namely 34 (59.6%), the most poor husband support was 29 (50.9%) and the support of health workers was 31 (54.4%). The conclusion is that there is a relationship between husband support and VIA screening behavior, with P.value = 0.016 ( $P < 0.05$ ) and there is a relationship between health worker support and VIA screening behavior, with P.value = 0.032 ( $P < 0.05$ ) [17].

Based on the results of the theory conveyed by previous researchers, the researcher argues that motivation is very influential on VIA screening, therefore, researchers really hope that the results of the study can be used as guidelines, especially for health workers, so that the motivation of women of childbearing age increases, it can be done through the closest people such as husbands or families and health workers provide assistance in order to increase the motivation of women of childbearing age.

#### 4. CONCLUSION

From the results of research on the relationship between the level of knowledge and motivation of childbearing age in Visual Inspection with Acetic Acid (VIA) in the Working Area of the Rawamerta Health Center in 2022, the results of the analysis using the chi - square test statistics by assessing the relationship between the level of knowledge of women of childbearing age in VIA screening showed an Asymp.sign value of 0.00, because the p-value of 0.00  $<0.05$ , it can be concluded that there is a relationship between the level of knowledge of women of childbearing age and conducting VIA screening. And the results of the analysis using the chi-square test statistics by assessing the relationship between the motivation of women of childbearing age in VIA screening showed an Asymp.sign value of 0.00, because the p-value of

0.00 <0.05, it can be concluded that there is a relationship between the motivation of women of childbearing age by performing VIA screening. It is expected to conduct health counseling and provide support to women of childbearing age in the working area of the rawamerta health center in order to increase motivation for VIA screening.

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