Contents lists available at iocspublisher

Science Midwifery

Journal Homepage: www.midwifery.iocspublisher.org

The Influence of Demographic Factors and Psychological Factors of Fertile Age Women (WUS) on Cervical Cancer Screening Acetic Acid Visual Inspection Method (IVA) in the Work Area of Puskesmas Sitinjo, Dairi Regency, 2016

Perak MA Hutagalung[1], Herlina Evi Yanti Manik[2]

[1,2]Poltekkes KemenKes Medan

ARTICLEINFO

Keywords:
Demographic, Psychological, Cervical Cancer, IVA Method

ABSTRACT

Data from Puskesmas Sitinjo that in 2015 the number of goals WUS many as 2,257 and target of 600 only 181 (30%) WUS who checked himself participated in the screening program (early detection) method of IVA cervical cancer. Factors that are supposed to influence the screening measures that are demographic factors (age, education, income, occupation, marital status) and psychological factors (perception, attitude, and motivation). This research is analytic survey with cross-sectional approach. The study was conducted in Puskesmas Sitinjo. The study was conducted in April-July 2016. The population of as many as 2257 people, while a sample of 291 people. Data analysis was performed using univariate, bivariate analysis using chi-square test, and multivariate logistic regression test double. Based on the results of the study showed that demographic factors (education, p = 0.002; work, p = 0.000) and psychological factors (perception, p = 0.000; attitude, p = 0.001; and motivation, p = 0.000) significantly influence the actions cervical cancer screening the method IVA in Puskesmas Sitinjo Dairi 2016. Variables that no effect is age (0.895), income (0.128), marital status (p = ~). The variables that most influence the actions of cervical cancer screening method IVA is motivation. Mothers with good motivation to have a tendency to take action cervical cancer screening method IVA 23.8 times higher than those whose mothers lack motivation. PHC Chief Sitinjo suggested to disseminate information to the public, especially the EFA mothers who have been sexually active through health education, distribution of brochures, leaflets,

E-mail:
Perakhutagalung61@gmail.com
herlinamanik076@gmail.com

1. Introduction

Cervical cancer or cervical cancer is a carcinoma that grows in the cervix / cervix, which is an area in the female reproductive organ which is the entrance to the uterus, which is located between the uterus (uterus) and the intercourse (vagina). This cancer usually occurs in women who have aged, but statistical evidence shows that cervical cancer can also affect women aged between 20 to 30 years. One way to detect cervical cancer is by a visual inspection test for acetic acid (IVA) (Priyanto, 2010).

Based on data from the World Health Organization (WHO) and the International Agency for Research on Cancer (IARC) in 2013, cervical cancer ranks second of all cancers in women with an incidence of 9.7% and a death rate of 9.3% of all cancers in women in the world. . It is estimated that more than 270,000 deaths from cervical cancer each year, more than 85% occur in developing countries (WHO, 2014).

Cervical cancer in Asia is the second most common cancer in women and more than half of Asian women who suffer from cervical cancer die. This is the same as 226,000 women diagnosed with cervical cancer and as many as 143,000 causes of death or in other words, every 4 minutes, a woman in Asia Pacific dies of cervical cancer (MOH, 2009).

The incidence of cervical cancer in the Association of South East Asian Nations (ASEAN) countries in 2011 recorded that in Singapore it was 25.0 for the Chinese race, 23.7 for the Thai race and 17.8 for the Malay race per 100,000 population (Nuranna). , 2012).

The prevalence of cancer in Indonesia is also quite high. Based on data from Basic Health Research (Riskesdas) in 2013, the prevalence of cancer in Indonesia is 1.4 per 1000 population or around 330,000 people (Kemenkes RI, 2013). Cervical cancer is a cancer with the highest prevalence in Indonesia in 2013, namely 0.8 ‰ Riau Islands Province, North Maluku Province, and Yogyakarta Special Region Province having the highest cervical cancer prevalence, namely 1.5 ‰ (Ministry of Health RI, 2014).

North Sumatra Province is one of the provinces with the incidence of cervical cancer which tends to fluctuate. North Sumatra Province Health Profile Data (2012), the number of cervical cancer patients in 2010 was recorded as 475 cases, in 2011 as many as 548 cases and in 2012 as many as 681 cases. This data shows that there is an increase in cases from year to year (Dinkes Propsu, 2013).

Based on the Health Profile of Dairi District, in 2014, the number of women of reproductive age (15 years to 44 years) was 32,541 people, with a cervical cancer morbidity rate of 39 people. This number increased compared to 2013, which was as many as 31 people (Dinkes Kabupaten Dairi, 2014).

Contents lists available at iocspublisher

Science Midwifery

Journal Homepage: www.midwifery.iocspublisher.org

One of the factors causing the high incidence of cancer in Indonesia is that the awareness of women who have had sexual intercourse to do early detection is still low. This is due to the lack of knowledge and understanding of women about cervical cancer itself. In addition, examinations that must be carried out by opening the genitals of many women feel ashamed and feel unprepared if they are diagnosed with cervical cancer after the examination. Other causes of cervical cancer are late marriage, and multiple partners. Early detection is the key to healing all types of cancer. The importance of early detection is carried out to reduce the prevalence of the number of sufferers and to prevent cancer conditions at an advanced stage.

The IVA examination aims to identify early changes in cervical epithelial cells so that preventive measures can be taken from invasive cancer IVA makes cervical cancer a preventable disease.The IVA test has a sensitivity level of 90% if it is done every year, 87% if it is done every two years, 78% if it is done every five years. The IVA method can be an alternative to the Pap smear test that is easy and practical to do because it can be done by private practice midwives and in remote places and only requires simple tools for basic gynecological examinations. (Rasjidi, 2010).

Puskesmas Sitinjo is one of the puskesmas in Dairi Regency, located in Sitinjoyang Subdistrict, adjacent to the city center of Sidikalang. People generally have high school education qualifications (SMA) which make it easy for people to receive and get access to information from the information media, the public, and other health workers. However, of several puskesmas located close to the city center of Sidikalang in Dairi District, Puskesmas Sitinjo recorded the lowest achievement compared to the puskesmas in the city center. In 2015, with the target number of WUS at Sitinjo Health Center as much as 2,257 and a target of 600 only 181 (30%) WUS participated in the screening program (early detection) for cervical cancer using the IVA method. In 2016,

According to health workers who handle the IVA test program at the Sitinjo Health Center, the cause of the low achievement of early detection of cervical cancer is due to the wrong perception where women feel inconvenient, doubts about the importance of IVA testing, women's reluctance to be examined because they are ashamed to open their intimate parts (pubic organs) especially if it is a male doctor who is conducting the examination. Lack of knowledge about the importance of the examination, fear of the reality of the results of the examination that will be faced, fear of feeling sick at the examination, reluctance to be examined by a male doctor, lack of motivation, both self-desire and encouragement from the closest people such as husband, feeling not sick an examination needs to be done, and there are those who think that the examination is not needed or not.

Based on the description above, the researchers are interested in conducting research with the title: The Influence of Demographic and Psychological Factors of Fertile Age Women (WUS) on Cervical Cancer Screening Acetic Acid Visual Inspection Method (IVA) in the Work Area of Puskesmas Sitinjo, Dairi Regency.

2. Literature Review

2.1 Cervical Cancer (Cervical Cancer)

Cervical cancer or cervical cancer is the uncontrolled growth of neoplastic cells in the tissue of the female genetic organs consisting of the uterus, fallopian tubes, ovaries, vagina and vulva. Cancer of the genetic organs is the second largest cause of morbidity and mortality after breast cancer. Cervical cancer is cancer that occurs in the uterine cervix (cervix), which is an area in the female reproductive organ which is the entrance to the uterus which is located between the uterus and the intercourse (vaginal) (Sukaca, 2009).

The main cause of cervical cancer is infection with the Human Papilloma Virus (HPV). Currently, there are 138 types of HPV that have been identified, of which 40 can be transmitted through sexual contact. High-risk HPV viruses that can be transmitted through sexual contact are types 16,18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 68, 69, and there may be several other types. Several studies suggest that more than 90% of cervical cancers are caused by types 16 and 18. Of these two types HPV 16 alone causes more than 50% of cervical cancers. A person who has been infected with HPV 16 has a 5% chance of getting the cervix (Rasjidi, 2010).

The factors that cause women to be exposed to HPV are: 1) Getting married / starting sexual activity at a young age (less than 20 years); 2) Multiple sexual partners; 3) Having sex with men who frequently change partners; 4) History of infection in the genital area or pelvic inflammation; 5) Women who gave birth to many children; 6) Women who smoke are two and a half times more likely to develop cervical cancer than nonsmokers; 7) Women who become passive smokers (who live with families who smoke)

Contents lists available at iocspublisher

Science Midwifery

Journal Homepage: www.midwifery.iocspublisher.org

will have an increased risk of 1.4 (one point four) times compared to women who live with free air (Ministry of Health, 2010).

In the early stages, there are no specific symptoms even generally without symptoms. At this early stage, it can be detected early (Manuaba, 2008). Symptoms that may be detected are at first a watery vaginal discharge, then the color of the secretions becomes pink and then brown like dirty water and has a foul odor caused by tumor tissue necrosis and infection (Nugroho BD, 2010).

At the beginning of the advanced stage, there was a history of intermenstrual bleeding. Usually there is bleeding after intercourse (contact bleeding), anemia is often found as a result of ongoing bleeding (Rayburn, 2008). At an advanced stage there is pain in the pelvic area due to a necrotic tumor, the feeling of pain also radiating to the thigh. Symptoms of hematuria and rectal bleeding arise when the tumor has spread to the bladder and rectum. Weight loss and anemia are characteristics of cervical cancer stage (Sinclair, 2012).

Prevention of cervical cancer is the efforts made to reduce the morbidity and mortality rate from cervical cancer, which can be done in 3 ways, namely:

a. Primary prevention, can be done through counseling and education to the public regarding the factors that cause cervical cancer. (Hidayati, 2011).
b. Secondary Prevention, by conducting early detection of cancer and examining clinical symptoms at an early stage. (Tambunan, 2013).
c. Tertiary Prevention, by maintaining the quality of life of people who are positive for cancer by providing good nutrition, providing support to sufferers from both family and health workers. (Priyanto, 2010).

2.2 Early Detection of Cervical Cancer using the IVA Method

According to Octiyanti (2012) early detection of cervical cancer is an effort to prevent secondary cervical cancer. Screening is carried out using certain tests to detect early cervical cancer in the precancerous phase.

Cervical Cancer Early Detection is necessary because:

a. Cervical cancer is an important public health problem in resource-limited developing countries.
b. The precancerous phase can be recognized and detected so that it can be managed safely, effectively and in an acceptable manner.
c. The development from the precancerous phase to cancer can take a relatively long time (up to 10 years) so that it is sufficient time for detection and therapy.
d. Therapy in the precancerous phase is very cheap compared to management when cancer has occurred.
e. Target: find cervical precancerous lesions (cervical intraepithelial lesions / cervical intraepithelial neoplasia.
f. If therapy is applied to cervical precancerous lesions, recovery can reach 100%.

2.3 *Health Belief Model* (Healthy Belief Model)

Health Belief Model(HBM) is a health behavior change and psychological model developed by M. Rosenstock in 1966, to study and promote the improvement of health care. This model was followed up by Becker and colleagues in the 1970s and 1980s. HBM theory is based on the understanding that a person will take actions that will be related to health. This theory is stated in 5 aspects of thinking in individuals that affect the efforts in the individual to determine what is good for him, namely perceived susceptibility, perceived severity, perceived benefits of action (perceived benefits of the actions taken), perceived barrier to action (perceived barriers to the action taken), cues to action (cues to take action). This is done with the aim of self-efficacy or self-effort to determine what is good for him (Notoatmodjo, 2012).

2.4 Health Behavior

Behavior is all forms of individual experiences and interactions with their environment, especially those concerning knowledge and attitudes about health and their actions related to health (Sarwono, 2013).

More operationally, behavior can be interpreted as a response of a person's organism to stimuli from outside the subject (Notoatmodjo, 2012). This response takes two forms, namely:

a. Passive form is an internal response that occurs in humans and is not directly visible to others (covert behavior), for example thinking, responses or inner attitudes and knowledge.
b. The active form is when the behavior is clearly observable directly. For example, a mother who gives breast milk (ASI) to her child. Because their behavior is visible in the form of real action it is called an overt behavior.

Contents lists available at iocspublisher

Science Midwifery

Journal Homepage: www.midwifery.iocspublisher.org

2.5 Conceptual framework

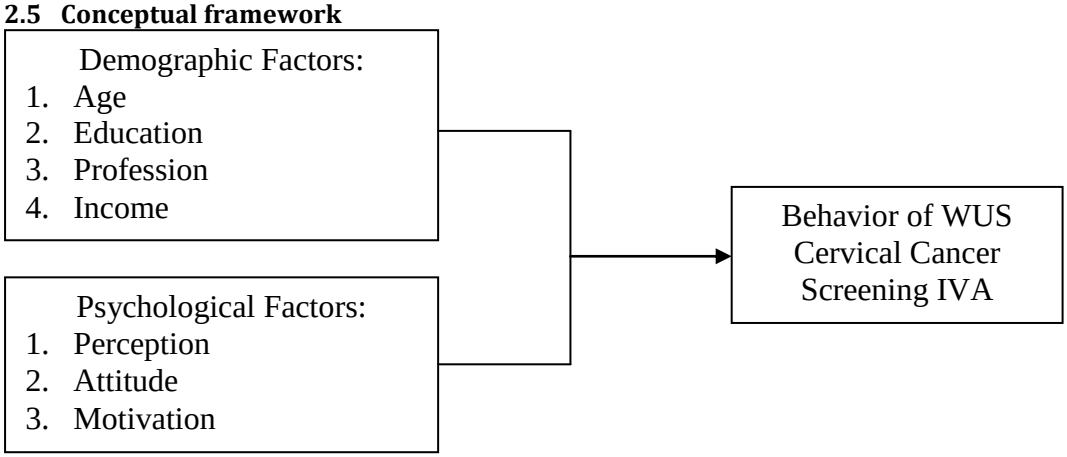

Fig 1. Research Concept Framework

2.6 Research Hypothesis

a. There is an effect of the age of WUS on cervical cancer screening with the IVA method in the Sitinjo Public Health Center, Dairi Regency.
b. There is an effect of WUS education on cervical cancer screening with the IVA method in the Sitinjo Health Center, Dairi Regency.
c. There is an effect of the work of WUS on cervical cancer screening with the IVA method in the Sitinjo Health Center, Dairi Regency.
d. There is an effect of WUS income on cervical cancer screening with the IVA method in the Sitinjo Health Center, Dairi Regency.
e. There is an effect of WUS perception on cervical cancer screening with IVA method in the Sitinjo Public Health Center, Dairi Regency.
f. There is an influence of WUS attitude towards cervical cancer screening with IVA method in the Work Area of Puskesmas Sitinjo, Dairi Regency.

There is an influence of WUS motivation on cervical cancer screening with the IVA method in the Sitinjo Health Center, Dairi Regency.

3. Research methods

This study used an analytic survey method with a cross sectional approach (cross sectional) where measurements or observations were made at the same time on the independent and dependent variable data at one time (Notoatmodjo, 2010). This research was conducted in the work area of Puskesmas Sitinjo, Dairi Regency from April 2016 to July 2016. The population in this study were all women of childbearing age (WUS) registered and living in the work area of Puskesmas Sitinjo as many as 2,257 people. With the Lameshow formula, a sample of 291 people was obtained.

Data analysis uses univariate analysis, namely analysis that focuses on data analysis or descriptions of the data obtained, which determines the frequency distribution of each of the independent and dependent variables entered in the frequency distribution table; Bivariate analysis is an analysis to see the relationship between the independent and dependent variables using the chi square test at the 95% confidence level ($p < 0.05$). This bivariate analysis also functions to determine the model in multiple logistic regression tests that is feasible as a candidate with a significance level (sig.) Or p-value <0.25; and multivariate analysis to determine the effect of the dependent variable with the independent variable simultaneously. Multivariate analysis was carried out by connecting several dichotomous independent variables (2 categories). The multivariate statistical analysis of this study used multivariate multiple logistic regression analysis. Multiple logistic regression is a multiple regression model that involves more than one predictor / independent variable.

4. Research Results and Discussion

4.1 Research result

The results of the research above indicate that based on age most of the respondents were ≤35 years old as many as 158 people (54.3%). Based on the level of education, some respondents have a low

Contents lists available at iocspublisher

Science Midwifery

Journal Homepage: www.midwifery.iocspublisher.org

education (SD / SMP) as many as 207 people (71.1%). Based on occupation, most of the respondents did not work, namely as (housewives) as many as 206 people (70.8%). Based on the respondent's or family's income, most of the respondents had a family income below the regional minimum wage (UMR) or low income (<Rp. 1,626,000.-) as many as 189 people (64.9%).

a. Psychological Factors

Table 1.

Frequency Distribution of Respondents Psychological Factors in the Work Area of Puskesmas Sitinjo, Dairi Regency, 2016

No.	Psychological Factors	amount	Percentage (%)
1.	Perception:		
	a. Positive	84	28.9
	b. Negative	207	71.1
	Total	291	100.0
2.	Attitude:		
	a. Positive	82	28.2
	b. Negative	209	71.8
	Total	291	100.0
3.	Motivation:		
	a. High	86	29.6
	b. Low	205	70.4
	Total	291	100.0

The table above shows that most of the respondents' perceptions were in the negative category as many as 207 people (71.1%). Based on the attitude, most of the respondents' attitudes were in the negative category as many as 209 people (71.8%). Based on motivation, most of the respondents' motivation was in the low category as many as 205 people (70.4%).

b. Cervical Cancer Screening Action Method IVA

Table 2.

Distribution of Frequency of Cervical Cancer Screening Actions in the Work Area of Puskesmas Sitinjo, Dairi Regency, 2016

No.	Cervical Cancer Screening Action Method IVA	amount	Percentage (%)
1	Yes	78	26.8
2	Never	213	73.2
	Total	291	100.0

The table above shows that most of the respondents stated that they had never done the IVA cervical cancer screening method as many as 213 people (73.2%), a small proportion of respondents said they did the IVA method of cervical cancer screening as many as 78 people (26.8%).

4.2 Bivariate Analysis

Table 3

Cross Table of Characteristics of Respondents with the IVA Method of Cervical Cancer Screening in the Work Area of Puskesmas Sitinjo, Dairi Regency, 2016

No.	Characteristics of Respondents	Cervical Cancer Screening Action Method IVA				amount		*p-value*
		Yes		Never				
		F	%	F	%	F	%	
1	**Age**							
	1. <35 years	43	27.2	115	72.8	158	100.0	0.895
	2. > 35 years	35	26.3	98	73.7	133	100.0	
2	**Education**							
	1. Low (SD / SMP)	15	7,2	192	92.8	207	100.0	0,000
	2. High (SMA / College)	63	75.0	21	25.0	84	100.0	
3	**Profession**							
	1. Work (employee, merchant, or work outside the home	13	15.3	72	84.7	85	100.0	0.005
	2. Not working (housewife)	65	31.6	141	68.4	206	100.0	

Contents lists available at iocspublisher

Science Midwifery

Journal Homepage: www.midwifery.iocspublisher.org

No.	Characteristics of Respondents	Cervical Cancer Screening Action Method IVA				amount		*p-value*
		Yes		Never				
		F	%	F	%	F	%	
4	**Income**							
	1. Low (<Rp. 1,262,000.-)	45	23.8	144	76.2	189	100.0	0.128
	2. High (> Rp. 1,262,000.-)	33	32.4	69	67.6	102	100.0	
5	**Marital status**							
	1. 1 time	78	26.8	213	73.2	291	100.0	
6	**Perception**							
	1. Positive	62	73.8	22	26.2	84	100.0	0,000
	2. Negative	16	7,7	191	92.3	207	100.0	
	Attitude							
	1. Positive	56	68.3	26	31.7	82	100.0	0,000
	2. Negative	22	10.5	187	89.5	209	100.0	
	Motivation							
	1. High	63	73.3	23	26.7	86	100.0	0,000
	2. Low	15	7.3	190	92.7	205	100.0	

The table above based on age shows that most of the 158 respondents aged <35 years have never done cervical cancer screening with the IVA method as many as 115 people (72.8%). The results of the bivariate analysis using the Chi-Square statistical test showed that the p value was 0.895> 0.05, meaning that there was no significant relationship between age and cervical cancer screening with the IVA method in the work area of the Sitinjo Public Health Center, Dairi Regency in 2016.

Based on education, most of the 207 respondents with low education (SD / SMP) never did IVA screening for cervical cancer as many as 192 people (92.8%). The results of the bivariate analysis using the Chi-Square statistical test showed that the p value of 0.000 <0.05 means that there is a significant relationship between education and cervical cancer screening with the IVA method in the work area of Puskesmas Sitinjo, Dairi Regency in 2016.

Based on occupation, most of the 85 respondents who work as (employees, traders, or working outside the home) have never done the IVA cervical cancer screening method, as many as 72 people (84.7%). The results of the bivariate analysis using the Chi-Square statistical test showed that the p value of 0.005 <0.05 means that there is a significant relationship between work and cervical cancer screening with the IVA method in the work area of Puskesmas Sitinjo, Dairi Regency in 2016.

Based on the income level, most of the 189 low-income respondents (<Rp. 1,262,000.-) had never done IVA screening for cervical cancer as many as 144 people (76.2%). The results of the bivariate analysis using the Chi-Square statistical test showed that the p value was 0.128> 0.05, meaning that there was no significant relationship between income and cervical cancer screening with the IVA method in the work area of the Sitinjo Public Health Center, Dairi Regency in 2016.

Based on marital status, most of the 291 respondents stated that their marital status had never performed IVA screening for cervical cancer as many as 213 people (73.2%). The results of the bivariate analysis using the Chi-Square statistical test showed that the p value was not obtained because the marital status had only one category.

Based on the attitudes of most of the 209 respondents who had a negative attitude, the majority had never done the IVA method of cervical cancer screening as many as 187 people (89.5%). The results of the bivariate analysis using the Chi-Square statistical test showed that the p value was 0,000 <0.05, meaning that there was a significant relationship between attitudes and cervical cancer screening with the IVA method in the work area of the Sitinjo Public Health Center, Dairi Regency in 2016.

Based on the motivation of most of the 205 respondents who had low motivation, the majority had never done the IVA method of cervical cancer screening as many as 190 people (92.7%). The results of the bivariate analysis using the Chi-Square statistical test showed that the p value of 0.000 <0.05 means that there is a significant relationship between motivation and cervical cancer screening with the IVA method in the work area of Puskesmas Sitinjo, Dairi Regency in 2016.

Contents lists available at iocspublisher

Science Midwifery

Journal Homepage: www.midwifery.iocspublisher.org

4.3 Multivariate Analysis

Table 4.
Selection of Variables that Become Model Candidates in Multiple Logistic Regression Test Based on Bivariate Analysis

No.	Variable	Sig. (p-value)
1	Age	0.895 *
2	Education	0,000
3	Profession	0.005
4	Income	0.128
5	Marital status	- *
6	Perception	0,000
7	Attitude	0,000
8	Motivation	0,000

* = Not included in the model because it has a significant value (p)> 0.25

Table 5
Multivariate Analysis Results Multiple Logistic Regression Test with Significant Variables

Variable	Sig. *(p-value)*	OR	95% CI for EXP (B)		Information
			Lower	Upper	
Education	0.002	6,346	1,986	20,276	Take effect
Profession	0,000	10,072	3,186	31,843	Take effect
Perception	0,000	15,785	5,348	46,593	Take effect
Attitude	0.001	5,842	2,009	16,989	Take effect
Motivation	0,000	23,846	7,758	73,292	Take effect
Constant	0,000	0.002			

Table 6.
Multivariate Analysis Results Multiple Logistic Regression Test with insignificant variables

Variable	Sig. (p-value)
Income	0.128

Income variable has no effect on cervical cancer screening by IVA method because it has a p value = 0.128. This is because both mothers who have low incomes and mothers with high incomes both do not perform cervical cancer screening with the IVA method or it can be said that there is no difference in the two categories seen from their actions for cervical cancer screening using the IVA method. .

4.4 Discussion

a. The Effect of Demographic Factors on the Cervical Cancer Screening Action by the IVA Method

Age-based demographic factors in the bivariate test were not affect the mother's actions to screen for cervical cancer using the IVA method with a value of p = 0.895. According to researchers, age has no effect on cervical cancer screening by the IVA test method because it has a statistically significant value greater than 0.05. In fact, in the field, the age variable has no effect on cervical cancer screening with the IVA method because in the <35 years old and> 35 years age group, there is no difference in action, that is, the majority of these two groups have never performed cervical cancer screening. the IVA method. This means that even though the mother is getting older, which means more frequent sexual intercourse and the risk of cervical cancer, the mother still does not want to be screened for cervical cancer. The results of this study are in line with Lubis' research at the Bandar Khalipah Public Health Center, Percut Sei Tuan Subdistrict, Deli Serdang Regency, showing that the age of PUS had no effect on PUS mothers doing IVA tests as early detection of cervical cancer (p = 0.972). Based on research conducted by Sakanti, Anggiasih in 2007, 78.57% of mothers who underwent Pap smear examinations were over 35 years of age. This is in accordance with the recommendation of the Indonesian Ministry of Health 2009 that early detection of cervical cancer is recommended for women aged 30-50 years, because cancer leces are more likely to be detected. Based on research conducted by Sakanti, Anggiasih in 2007, 78.57% of mothers who underwent Pap smear

Contents lists available at iocspublisher

Science Midwifery

Journal Homepage: www.midwifery.iocspublisher.org

examinations were over 35 years of age. This is in accordance with the recommendation of the Indonesian Ministry of Health 2009 that early detection of cervical cancer is recommended for women aged 30-50 years, because cancer leces are more likely to be detected. Based on research conducted by Sakanti, Anggiasih in 2007, 78.57% of mothers who underwent Pap smear examinations were over 35 years of age. This is in accordance with the recommendation of the Indonesian Ministry of Health 2009 that early detection of cervical cancer is recommended for women aged 30-50 years, because cancer leces are more likely to be detected.

Based on education shows that peducation has an effect on the actions of mothers doing cervical cancer screening using the IVA method with a value of p = 0.002, and an OR value of 6.346, meaning that mothers with higher education have a tendency to perform cervical cancer screening with the IVA method 6.3 times higher than that of mothers. low educated. In line with the results of Ismiyati's (2012) study, which found that there was no significant effect between PUS education and early detection of cervical cancer using the IVA method at Wonosari II Gunungkidul Health Center, with a p value = 0.641.According to Andersen and Newman (1973) in Notoatmodjo (2012) states that education is one of the predisposing factors that influence a person to need and access health services. Syaer (2010) in his research stated that education about health affects people's behavior in society. have health service facilities to cure their ailments. Education has a very important role in providing insight into the formation of attitudes which will then be followed.

Based on The work shows that work has an effect on the actions of mothers to screen for cervical cancer using the IVA method with a value of p = 0.000, and a value of OR = 10.072, meaning that mothers who do not work have a tendency to perform cervical cancer screening with the IVA method 10.0 times higher compared to working mothers. The results of this study are in accordance with the results of research conducted by Sulistiowati (2014) in Central Bogor District, Bogor City. The results show that there is a significant relationship between maternal occupation and early detection of cervical cancer with Visual Inspection of Acetic Acid (IVA), p = 0.003.

Based on the level of income the research results show that the income is not affect the mother's actions to screen for cervical cancer using the IVA method with a value of p = 0.128. According to the researchers, income has no effect on cervical cancer screening by the IVA test method because it has a statistically significant value greater than 0.05 and the fact is that based on the community income group which is divided into low-income and high-income groups there is no difference in action. there are both groups. The majority of respondents with low incomes and respondents with high incomes had never screened for cervical cancer. The results of this study are in line with Nasution's (2012) research at the Perbaungan Public Health Center, Serdang Bedagai Regency, that income does not affect the utilization of cervical cancer early detection services (p = 0.069> 0.05). This is because even though the mother has a good income, the mother does not want to take advantage of cervical cancer early detection services.

b. The Influence of Psychological Factors on the Cervical Cancer Screening Action by the IVA Method

Based on the perception of the research results show that pPerception affects the mother's actions to screen for cervical cancer using the IVA method with a value of p = 0.000, and a value of OR = 15.785, meaning that mothers with good perceptions have a tendency to perform cervical cancer screening with the IVA method 15.7 times higher than that of mothers. who have less perception. Research conducted by Octaviana (2015) shows that the perception of the benefits of cervical cancer detection is through early detection of cervical cancer. In the results of this study, 5% of the respondents stated that early detection of cervical cancer is to prevent cervical cancer and to detect cervical cancer. In the results of this study, 54% of the respondents stated that cervical cancer early detection measures to diagnose cervical cancer and perform early detection of cervical cancer. There was a relationship between individual susceptibility perceptions, disease seriousness, benefits and barriers with the use of IVA screening, p <0.05.

Based on the attitude of the research results show that the attitude influence on the actions of mothers doing cervical cancer screening with the IVA method with a value of p = 0.001, and the value of OR = 5.842, meaning that mothers with good attitudes have a tendency to perform cervical cancer screening with the IVA method 5.8 times higher than mothers who have less attitude. The results of Khosidah's (2014) study found that there was a significant relationship between the attitudes of WUS towards the IVA test and the behavior of the IVA test in West Purwokerto Subdistrict, Banyumas Regency in 2014 (p = 0.003).

Based on the motivation of the research results show that mmotivation has an effect on the mother's actions to screen for cervical cancer using the IVA method with a value of p = 0.000, and a value of OR

Contents lists available at iocspublisher

Science Midwifery

Journal Homepage: www.midwifery.iocspublisher.org

= 23.846, meaning that mothers with good motivation have a tendency to perform cervical cancer screening with the IVA method 23.8 times higher than that of mothers. lack of motivation. Motivation is the variable with the greatest influence compared to other variables on cervical cancer screening with the IVA method. This study is in line with Lubis' research (2012) at the Bandar Khalipah Public Health Center, Percut Sei Tuan District, Deli Serdang Regency, that the motivation of PUS has a significant effect on PUS mothers doing IVA tests as early detection of cervical cancer (p = 0.001). The motivation variable is the variable that most dominantly influences the mother in carrying out the IVA test.

5. Conclusion

a. Maternal age has no effect on cervical cancer screening with the IVA method at Puskesmas Sitinjo, Dairi Regency in 2016.
b. Education had a significant effect on cervical cancer screening with the IVA method at the Sitinjo Health Center, Dairi Regency in 2016. Mothers with low education tended to never screen for cervical cancer using the IVA method.
c. Work has a significant effect on cervical cancer screening with the IVA method at Puskesmas Sitinjo, Dairi Regency in 2016. Working mothers tend to never screen for cervical cancer using the IVA method.
d. Maternal income has no effect on cervical cancer screening with the IVA method at Sitinjo Public Health Center, Dairi Regency in 2016.
e. Mother's perception had a significant effect on cervical cancer screening with the IVA method at the Sitinjo Public Health Center, Dairi Regency in 2016. Mothers with poor perceptions tended to never screen for cervical cancer using the IVA method.
f. Mother attitudes have a significant effect on cervical cancer screening with the IVA method at the Sitinjo Public Health Center, Dairi Regency in 2016. Mothers who have a negative attitude tend to never screen for cervical cancer using the IVA method.
g. Maternal motivation has a significant effect on cervical cancer screening with the IVA method at Puskesmas Sitinjo, Dairi Regency in 2016. Mothers who have less motivation tend to never perform cervical cancer screening using the IVA method.
h. The most dominant factor influencing the cervical cancer screening action using the IVA method at Sitinjo Public Health Center, Dairi Regency in 2016 was motivation with OR value = 23.846, meaning that mothers with good motivation have a tendency to perform cervical cancer screening with the IVA method 23.8 times higher than mothers with less motivation.

6. Reference

[1] Dalimartha. S. (2014). Deteksi Dini Kanker dan Simplisia Anti Kanker. Jakarta: Swadaya.Depkes RI, 2009).
[2] Depkes RI. (2012). Buku Saku Pencegahan Kanker Leher Rahim dan Kanker Payudara. Jakarta: Ditjen PP & PL Departemen Kesehatan Republik Indonesia.
[3] Dinkes Kabupaten Dairi. (2015). Laporan program skrining deteksi dini metode IVA. Sidikalang: Dinas Kesehatan Kabupaten Dairi.
[4] Dinkes Propsu. (2013). Profil Kesehatan Sumatera Utara Tahun 2013. Medan: Dinas Kesehatan Propinsi Sumatera Utara.
[5] Hidayati, W.B. (2011). Kanker Serviks Displasia Dapat Disembuhkan. Medika XXVIII (3): 9.
[6] Ismiyati, E. (2012). Efektifitas Program Pemeriksaan Metode Inspeksi Visual Asetat (IVA) Untuk Deteksi Dini Kanker Leher Rahim (Kanker Serviks) di Puskesmas Wonosari II Kabupaten Gunungkidul. Abstrak.
[7] Kemenkes RI. (2013). Riset Kesehatan Dasar (Riskesdas) Tahun 2013. Jakarta: Kementerian Kesehatan Republik Indonesia.
[8] Kemenkes RI. (2014). Profil Kesehatan Indonesia Tahun 2013. Jakarta: Kementerian Kesehatan Republik Indonesia.
[9] Khosidah. A. (2014). Faktor-faktor Yang Mempengaruhi Ibu Rumah Tangga Dalam Melakukan Tes IVA Sebagai Upaya Deteksi Dini Kanker Serviks. Purwokerto: Akademi Kebidanan YLPP Purwokerto.
[10] Lubis, M.E. (2012). Pengaruh Karakteristik Dan Psikis Ibu Pus Untuk Melakukan Test Inspeksi Visual Asam Asetat (IVA) Sebagai Deteksi Dini Kanker Leher Rahim di Wilayah Kerja Puskesmas Bandar

Contents lists available at iocspublisher

Science Midwifery

Journal Homepage: www.midwifery.iocspublisher.org

Khalipah Kecamatan Percut Sei Tuan Kabupaten Deli Serdang. Tesis. Medan: Fakultas kesehatan Masyarakat Universitas Sumatera Utara.

[11] Nasution, Y.I. (2012). Pengaruh Sosiodemografi Dan Penyedia Pelayanan Kesehatan Terhadap Pemanfaatan Pelayanan Deteksi Dini Kanker Serviks Di Puskesmas Perbaungan Kabupaten Serdang Bedagai Tahun 2012. Tesis. Medan: Fakultas kesehatan Masyarakat Universitas Sumatera Utara.

[12] Notoatmodjo, S. (2012). Promosi Kesehatan dan Ilmu Perilaku. Cetakan Kedua. Jakarta: Rineka Cipta.

[13] Notoatmodjo, 2010

[14] Nugroho. (2010). Penatalaksanaan IVA. Cetakan Pertama, Jakarta: Arcan.

[15] Nuranna dan Prayitno. (2012). Buku Acuan Program Pencegahan Kanker Serviks See and Treat. Jakarta : EGC.

[16] Octaviana, N.M. (2015). Hubungan Antara Persepsi Kerentanan Individu, Keseriusan Penyakit, Manfaat Dan Hambatan Dengan Penggunaan Skrining Inspeksi Visual Asam Asetat Pada Wanita Usia Subur. Surakarta: Program Pascasarjana Magister Ilmu Kesehatan Masyarakat Universitas Sebelas Maret.

[17] Octiyanti (2012)

[18] Priyanto. (2010). Pencegahan dan Deteksi Dini Kanker Serviks. Jakarta; Cermin Dunia Kedokteran.

[19] Puskesmas Sitinjo. (2015). Laporan Pelaksanaan Tes IVA di Puskesmas Sitinjo Kabupaten Dairi. Sitinjo: Puskesmas Sitinjo.

[20] Rasjidi, I. (2010). Manual Prakanker Serviks. Cetakan Pertama, Edisi I, Jakarta : Sagung Seto.

[21] Sakanti, A. (2007). Faktor-faktor yang berhubungan dengan perilaku pemeriksaan papsmear pada wanita usia subur di Puskesmas Kecamatan Makassar Tahun 2007. Skripsi. Jakarta: Fakultas Kesehatan Masyarakat Universitas Indonesia.

[22] Sukaca, Bertiani E. (2012). Cara Cerdas Menghadapi Kanker Serviks. Yogyakarta : Genius.

[23] Sulistiowati, E. (2014). Pengetahuan Tentang Faktor Risiko, Perilaku Dan Deteksi Dini Kanker Serviks Dengan Inspeksi Visual Asam Asetat (IVA) Pada Wanita Di Kecamatan Bogor Tengah, Kota Bogor. Bul. Penelit. Kesehat, Vol. 42, No. 3, September 2014: 193-202.

[24] Tambunan, G.W. (2013). Diagnosis dan Tatalaksana Sepuluh Jenis Kanker Terbanyak di Indonesia. Jakarta: Penerbit Buku Kedokteran EGC.

[25] WHO. (2014). International agency for research on cancer (IARC) handbooks of cancer prevention cervical cancer screening (e-book). Edisi ke 10: Lyon: IARC Press; 2013 (diunduh 15 Juli 2012). Tersedia dari: http://gigopedia.com/items:links?eid=nxa%2F5gAjPj%2Fd5wiYebMSS6BBbZUgonjJIBR931XF161%3D