

The Influence of Intrinsic and Extrinsic Factors on the Participation of Women in Fertile Age Couples (PUS) in the Asamasetat Visualization (IVA) Inspection Program at the Sigalingging Health Center, Parbuluan District, Dairi Regency in 2015

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ARTICLE INFO

Keywords:

Utilization IVA, Women Of Childbearing Age

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ABSTRACT

The latest survey about cervical cancer showed 40,000 new cases of cervical cancer in Southeast Asia, and 22,000 of them died. In Indonesia, an estimated 15,000 new cases of cervical cancer occur each year, while the death rate estimated 7500 cases per year. This research is a research method analytic survey with cross sectional design (cross-sectional) to determine the intrinsic factor (knowledge, attitude), extrinsic factors (husband's support, exposure information), while the dependent variable (Y) is the participation of women in the examination IVA in PHC Sigalingging. The population in this study were women EFA in Puskesmas Sigalingging, as many as 2,327 people. Samples were taken randomly with the inclusion criteria were women of EFA and sexually active, aged 15- 45 years as many as 122 people. The results showed no influence between knowledge and participation of women of child bearing age in the examination methods of IVA with a p-value = 0.011 <0.05. There is influence between attitudes to the participation of women of childbearing age in the examination methods of IVA with a p-value = 0.008 > 0.05. There is no effect between the support of husband / family with the participation of women of childbearing age with a p-value = 0.062 > 0.05. No effect between exposure to the participation of women of childbearing age with a p-value = 0.013 <0.05. Suggestion: For PHC Sigalingging in order to improve health education activities on early detection of cervical cancer methods IVA, and for DHO Dairi: in order to give a fillip to the health center pilot IVA and add the number of trained personnel IVA,

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1. Introduction

Cervical cancer is a major health problem for women around the world. Cervical cancer is a malignancy that occurs in the cervix (cervix) and is caused by infection with the Human Papilloma Virus (HPV). Cervical cancer or cervical cancer is a malignancy or neoplasm that occurs in the cervix, which is the lowest part of the uterus to the hole of intercourse (vagina).¹

Currently, cervical cancer is the second most common cancer affecting women in the world and the first rank for women in developing countries. Based on the World Health Organization (WHO), it is known that there are 493,243 people / year new cervical cancer sufferers in the world with a death rate due to this cancer of 273,505 people / year.²

A recent survey of cervical cancer shows that there are 40,000 new cases of cervical cancer in Southeast Asia and 22,000 of them have died.³ Five studies conducted by the Alliance for Cervical Cancer Prevention (ACCP) in South Africa, Peru, Kenya and India examined the factors that influence For a woman of fertile age (WUS) to participate in the IVA test, the results of the study showed that the WUS in India and South Africa who participated in the IVA test had less education, low socioeconomic status, and less contact with health services. The results of a study in South Africa show that women who do not access IVA early detection services tend to be women who are more than 45 years old, poor, have low education, are unemployed, live alone without a partner, not familiar with other women who have followed early detection and rarely take advantage of health services.² In Indonesia, an estimated 15,000 new cases of cervical cancer occur every year, while the death rate is estimated at 7500 cases per year. According to data from the Indonesian Cancer Foundation (YKI), this disease has claimed more than 250,000 women in the world and there are more than 15,000 new cervical cancer cases, which are approximately 8,000 deaths in Indonesia each year.

Data from the North Sumatra Provincial Health Office, the number of cervical cancer patients in 2000 was 548 years, in 2001 there were 683 cases. Based on data obtained from the Dairi District Health Office, the number of positive IVAs in 2012 was 49 cases (0.68%) out of 7,216 WUS

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who took the IVA test. Data in 2013, there were 13 cases (0.18%) out of 7,381 women who took the IVA test. 4

Each district or city is determined that 80% of WUSs get IVA inspection services, but not all districts or cities have met the target of IVA coverage.⁵ The IVA coverage in Dairi Regency in 2012 was reported to be 7,216 WUS (40.10%) where the target was 18,000 WUS and in 2013 it was reported at 7,381 WUS (73.81%) where the target was 10,000 WUS. 6

Efforts to prevent cervical cancer have been carried out by the Ministry of Health through a "see and treat" program. The Female Cancer Program in Bali was carried out by the Bali Provincial Health Office from 2007 to 2010 with activities including training, health services and counseling. The extension sites in this program cover 11,800 targets and as many as 3,900 WUS IVA services in each district or city in Bali Province. The targets set in this program are women aged 35-60 years. The high number of cervical cancer sufferers in Indonesia is because this disease does not cause symptoms and the low awareness of women to check their health. The low coverage of early detection is one reason for the growing development of cervical cancer. 5

This is based on the fact that more than 50% of women diagnosed with cancer have never previously undergone early detection. Research at Cipto Mangunkusumo Hospital shows that around 69.4% of women diagnosed with cancer never undergo early detection, so by the time cancer is discovered, cancer has been found at an advanced stage and treatment is too late.⁶

The reasons a woman does not undergo early detection of cervical cancer are due to ignorance, shame, fear and cost factors. This is generally caused by the low level of education and knowledge of the population, especially women. Eastern culture and customs in Indonesia have formed attitudes and perceptions that become barriers for women to open up to medical professionals and to protect their reproductive health. As a result, most patients arrive at an advanced stage, making it difficult to treat

Many factors influence community participation in following the examination.⁸ The triggering factors for behavior are thoughts and motivation to behave. These factors include knowledge, attitudes, beliefs, values and perceptions related to individual motivation to behave. 9

Based on the description above, the researcher wanted to know how the WUS participation in the IVA examination in Dairi Regency, especially in the working area of the Sigalingging Community Health Center.

2. Literature review

2.1 Participation

Participation is the participation of a person or community group in the development process both in the form of statements and in the form of activities by providing input on thoughts, energy, time, expertise, capital and / or material, as well as taking advantage and enjoying the results of development.¹⁰

The government's efforts to reduce cervical cancer rates in women are realized by implementing an IVA examination program at Puskesmas. Implementation of IVA requires active participation from the group WUS to check himself into health services with the aim of early detection of cancer.

Many factors influence interest and willingness WUS to want to participate in this program. Mikkelsen, argued that the factors that influence community participation are:

- a. Social factors, namely seen from the existence of social differences in society to participate, the existence of social support for individuals.
- b. Cultural factors, namely the existence of habits or customs that are traditional, static and closed to change.
- c. Political factors, namely if the development process carried out does not involve the community at the beginning and end of the development process so that it is constrained to participate and make decisions.

WUS participation in the IVA program will improve their health status so that social support is needed from cadres, health workers, family / husbands. According to Taylor, this social support can be provided in the form of emotional support, instrumental support, informative support and appraisal / appreciation support

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According to Prety In Syahyuti, there are seven characteristics of the typology of participation, which are getting closer to the ideal form respectively: 13

- a. Passive or manipulative participation
- b. Informative participation
- c. Consultative participation
- d. Incentive participation
- e. Incentive participation
- f. Interactive participation
- g. Independent (self mobilization)

2.2 Factors that Affect WUS to have an IVA method

Early detection of cervical cancer using the IVA method is the cheapest and fastest method, but not all women want to do this examination. There are several things that influence it, namely:

- a. Age
- b. Education
- c. Knowledge
- d. Income
- e. Attitude
- f. Availability of information
- g. Time availability
- h. Husband's support
- i. Health worker support
- j. Affordability / Access to Health Facilities

2.3 IVA (Visual Inspection of Acetic Acid)

Visual inspection of acetic acid is a visual test using a solution of vinegar (2% acetic acid) and a solution of lugol iosium on the cervix and observes the color change that occurs after smearing. The goal is to see the presence of dysplasia of cells as a method of cervical cancer screening. The indication of this test is to screen for cervical cancer. However, it is not recommended in postmenopausal women, because the transitional zone area is often located in the cervical canal and is not visible by inspection. 3

2.4 Research Concept Framework

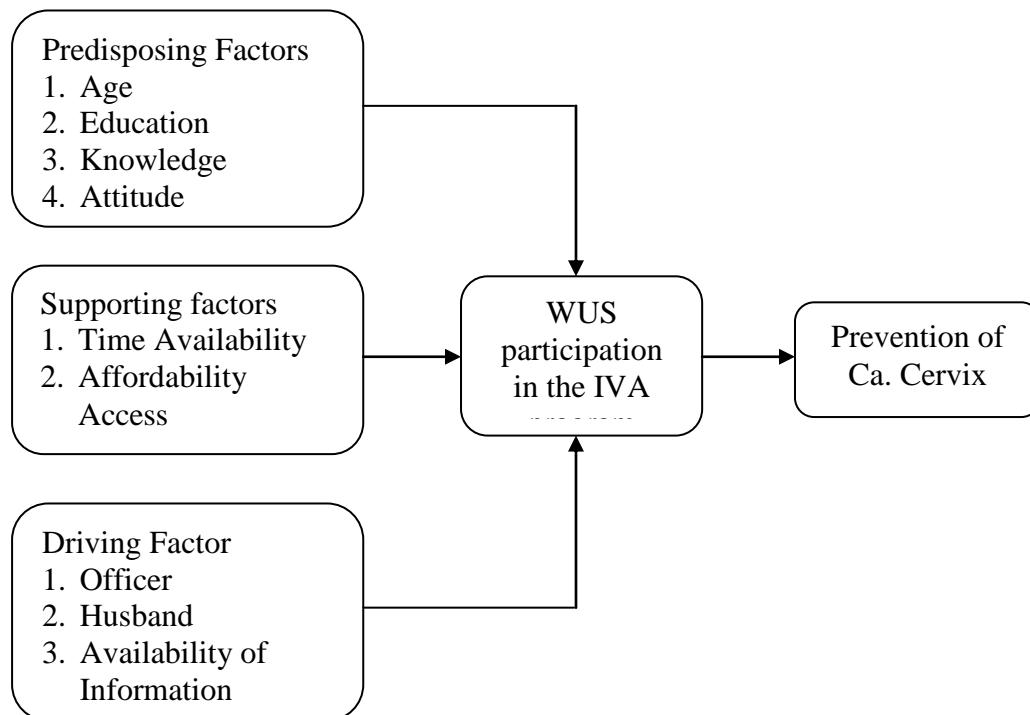


Fig 1. Research Concept Framework

3. Research methods

This type of research is an analytical survey research method with a cross sectional research design (cross-sectional). This research was conducted with instantaneous measurements, in which the subjects were observed only momentarily or once. To obtain information about the independent and dependent variables, measurements were carried out together at the time of the study.¹⁴ This research was conducted at the Sigalingging Public Health Center because the participation of WUS in the IVA program was low in Dairi Regency in August 2014 - February 2015. The population in this study were WUS who There are 2,327 people in the Sigalingging Puskesmas working area. The Lemeshow formula was used to determine the sample in order to obtain a sample of 122 people.

Data analysis was performed using univariate, bivariate, and multivariate analyzes. Univariate analysis is an analysis of each characteristic variable (age, education, occupation, income), knowledge and attitudes of the respondents and is presented in the form of a frequency distribution. Bivariate analysis is an analysis carried out to determine the relationship between two variables, namely the relationship between characteristics, respondent knowledge, attitudes, time availability, access affordability, husband's support, support from health workers and the availability of information with the participation of women with fertile women to perform IVA examinations (dependent variable). The statistical test used to test the relationship between the characteristics, knowledge and attitudes of the respondent with the action of the IVA examination with the Chi Square test at the 95% confidence level ($\alpha = 0.05$), if $p < 0,05$ then the variables above are stated to be significantly related. With the conclusion criteria: H_0 is rejected or H_a is accepted if p value (Sig) < 0.05 H_0 is accepted or H_a is rejected if p value (Sig) > 0.05 . Multivariate analysis is an analysis conducted to determine the independent variables (characteristics, knowledge and attitudes of respondents) which play a more dominant role (dominant) in relation to participation in IVA examinations based on regression analysis using logistic regression tests.

4. Research Results and Discussion

4.1 Bivariate Analysis

Table 1.

Results of the Influence of Respondents' Knowledge and Participation of Fertile Age Women on IVA Examination

Respondents' Knowledge	IVA participation				Total	P value
	Participate		Not Participating			
	f	%	f	%		
Good	31	25.48	11	9.01	42	0.011
Not good	9	7.32	71	58.19	80	
Total	40	32.80	82	67.20	122	

Based on the table above, it is known that the most respondents who did not participate in the IVA program had less knowledge, namely as many as 71 people (58.19%). Based on statistical tests it is known that the p -value = 0.011 < 0.05 , so it can be concluded that there is an influence between knowledge and the participation of women of childbearing age in Parbuluan District.

Table 2.

Results of the Influence of Respondents' Attitudes and Participation of Women at Fertile Age on IVA Examination

Attitude of Respondents	IVA participation				Total	P value
	Participate		Not Participating			
	f	%	f	%		
Good	22	18.05	40	32.78	62	0.008
Less	18	14.75	42	34.42	60	
Total	40	32.80	82	67.20	122	

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Based on the table above, it is known that the most respondents who did not participate in the IVA program had less attitudes, namely 42 people (34.42%) but only slightly different from those who had good attitudes but did not participate in the IVA examination (32.78%)). Based on the statistical test, it is known that the p-value = 0.008 > 0.05, so it can be concluded that there is no influence between attitudes and the participation of women of childbearing age in Parbuluan District.

Table 3.
Results of the Influence of Respondents' Husband / Family Support with the Participation of Women at Fertile Age on IVA Examination

Support / Respondent's Husband	IVA participation				Total	P value
	Participate		Not Participating			
	f	%	f	%		
Good	7	5.7	2	1.63	9	0.062
Less	33	27.0	80	65.57	113	
Total	40	32.7	82	67.3	122	

Based on the table above, it is known that the most respondents who did not participate in the IVA program with less family / husband support were 80 people (65.57%) but only slightly different from those who had good attitudes but did not participate in the IVA examination (32, 78%). Based on the statistical test, it is known that the p-value = 0.062 > 0.05, so it can be concluded that there is no influence between husband / family support and the participation of women of childbearing age in Parbuluan District.

Table 4.
Results of the Effect of Respondents' Information Exposure and Participation of Women at Fertile Age on IVA Examination

Respondent Information Exposure	IVA participation				Total	P value
	Participate		Not Participating			
	f	%	f	%		
Good	27	22.15	13	10.65	40	0.013
Less	13	10.65	69	56.55	82	
Total	40	32.80	82	67, 20	122	

Based on the table above, it is known that the most respondents who did not participate in the IVA program were less exposed to information and did not participate in the IVA examination, namely 69 people (56.55%). Based on statistical tests it is known that the p-value = 0.013 < 0.05, so it can be concluded that there is an influence between exposure and the participation of women of childbearing age in Parbuluan District.

4.2 Multivariate Analysis

Table 5.
Multivariate Analysis Results

Variable	B	Wald	p value	OR (95% CI)
Knowledge	0.416	0.395	, 011 *	4,415 (0,321; 40,442)
Attitude	1,138	4,194	, 008	18,782 (3,122; 41,327)
Husband / family support	2,142	9,608	, 062	14,899 (2,825; 29,684)
Information Disclosure	0.714	2,642	, 013 *	5,322 (2,254; 29,254)

Remarks * Significant

Based on Table 5, it can be seen that the results of the statistical test p-value < 0.05, so it can be concluded that the variables of knowledge and information exposure affect the participation of women of childbearing age in Parbuluan District. And the most influencing variable is the knowledge variable because it has the smallest p-value.

$$y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \dots + \beta_iX_i$$

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Participation of Women of Fertile Age = 4,415 (knowledge) + 18,782 (attitude) + 14,899 (husband / family support) + 5,322 (information exposure)

4.3 Discussion

a. Influence of Knowledge with Participation of Fertile Age Women in IVA Programs

The results showed that the majority of respondents who did not participate in the IVA program had low knowledge of 71 people (58.19%), while the majority of women with good knowledge did IVA examinations. Based on statistical tests it is known that the p -value = 0.011 < 0.05, so it can be concluded that there is an influence between knowledge and the participation of women of childbearing age in Parbuluan District.

This study is in accordance with Ni Wayan's (2011) research in Bali which states that women who have good knowledge are more motivated to check themselves with the IVA program. Knowledge of WUS who underwent an IVA test was significantly higher than knowledge of WUS who did not undergo an IVA test ($p < 0.05$). Knowledge is the result of "knowing" and this occurs after people sensing a certain object. It is further stated that the knowledge covered in the cognitive domain has 6 levels, namely: 1) know (know), 2) comprehension, application (application), 4) analysis, 5) synthesis (synthesis) and 6) evaluation. Based on these six cognitive domains, of course the women will know about the IVA test and its relation to cervical lesions. then understand its development, down to the ability to analyze, synthesize, and assess what needs to be done to prevent cervical cancer. WUS will acquire knowledge through a sensing system, namely the eyes and ears, so that behavior based on knowledge and awareness will last a long time (Sarini, 2011).

This study shows that knowledge of WUS who underwent an IVA test was higher than that of WUS who did not undergo an IVA test, this indicates that the decision making of WUS to undergo an IVA test was influenced by their knowledge. This is in line with qualitative research in Thailand, that the level of knowledge influences the decision to undergo an IVA test. This knowledge includes, among other things, about the disease, tests to detect disease, perceptions of disease and risk factors and its treatment (Blumenthal, 2004).

b. The Influence of Attitudes and Participation of Fertile Age Women on the IVA Program

The results of this study showed that the most respondents who did not participate in the IVA program had less attitudes, namely 42 people (34.42%) but only slightly different from those who had a good attitude but did not participate in the IVA examination (32.78%). Based on the statistical test, it is known that the p -value = 0.008 > 0.05, so it can be concluded that there is no influence between attitudes and the participation of women of childbearing age in Parbuluan District. The results of the study showed that there was no significant relationship between attitude and behavior in IVA examination.

This is not in line with research by Sakanti (2007) which states that all women who undergo cervical cancer early detection have a positive attitude towards early detection of cervical cancer. This research is also in line with Sarini's (2011) study which states that not all positive women do early detection of cervical cancer.

c. The Influence of Family or Husband Support with the Participation of Fertile Age Women on the IVA Program

Based on Table 3, it is known that the most respondents who did not participate in the IVA program had less attitudes, namely 80 people (65.57%) but only slightly different from those who had a good attitude but did not participate in the IVA examination (32.78%). Based on the statistical test, it is known that the p -value = 0.062 > 0.05, so it can be concluded that there is no influence between husband / family support and the participation of women of childbearing age in Parbuluan District.

The result of this study is different from Yuliawati's research (2012) which shows a p value of 0,000 which means that there is a significant relationship between husband / family support and IVA check behavior. Obtained PR 5,587 shows that those who get good support from their husbands are 5.587 times more likely to have good IVA behavior. This research also not This is in line with the research of Purba (2011) which states that an important factor in encouraging mothers to conduct early detection of cervical cancer is the closest people, namely husband and family.

Based on the researcher's observations, that in the Parbuluan District area, the target of counseling on early detection of cervical cancer with the IVA method is only women of

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childbearing age. To increase the coverage, the husband / father as the decision maker also needs to be given agarmau counseling and can encourage the target group to carry out IVA examinations. This can be done by providing counseling to husbands / fathers when there are men's recitation events, or other activities in each village. Apart from that, when there are home visit activities such as neonatal visits, visits by pregnant women, or other home visits, health workers or health cadres provide counseling to husbands / fathers.

d. **The Effect of Information Exposure and Participation of Fertile Women in the IVA Program**

Based on statistical tests, there is a significant relationship between information exposure and IVA examination behavior. Most respondents who did not participate in the IVA program on exposure to information and did not participate in the IVA examination were less, namely 69 people (56.55%). Based on statistical tests it is known that the p -value = 0.013 < 0.05, so it can be concluded that there is an influence between exposure and the participation of women of childbearing age in Parbuluan District. WUSs who are well informed or well informed are more likely to perform IVA examinations, compared to WUSs who have less information.

This study is in line with research conducted by Rohmawati (2010), which states that individual exposure to health information will encourage health behavior. This is also in line with Sarini's (2011) research, which states that most respondents who receive information from health workers will conduct early detection of cervical cancer. Delivery of good information between health workers and the public and between the community itself contributes positively to the behavior of cervical cancer early detection checks.

Women of childbearing age who do not undergo the IVA test certainly do not have the experience of undergoing an IVA test, plus the lack of information obtained by WUS causes WUS's knowledge of the IVA test to be low. With no experience and lack of information, the knowledge of WUSs who did not undergo an IVA test in both high and low IVA coverage areas would be the same, in fact, it could be that WUS in high IVA coverage areas had lower knowledge than WUS in low IVA coverage areas.

This is supported by research which states that individual exposure to health information will encourage health behavior (Rohmawati, 2011). This is also in line with a study which states that most respondents who receive information from health workers will carry out early detection checks for cervical cancer. Delivery of good information between health workers and the community and between the community itself contributes positively to the behavior of cervical cancer early detection checks (Sarini, 2011).

Lack of knowledge of both female prostitutes in low and high IVA coverage areas will influence them not to perform IVA examinations, which may be due to lack of information. Knowledge about cervical cancer and IVA examinations can be obtained through TV, radio, brochures, leaflets, friends, relatives, family and even health workers including health cadres. Increasing knowledge of WUS about cervical cancer and IVA examinations is obtained from counseling, both formally (on-site counseling) -Health service place, training for health cadres) and informal (counseling at arisan, banjar and others), both by health workers and from the local government. Such delivery is likely to reach people who have never or rarely been to puskesmas (Yuliawati, 2012).

5. **Conclusion**

- a. Distribution of knowledge Most respondents who did not participate in the IVA program with less knowledge were 71 people (58.19%). Based on statistical tests, it is known that the p -value = 0.011 < 0.05, so it can be concluded that there is an influence between knowledge and participation of women of childbearing age in the IVA method examination.
- b. The distribution of the attitudes of the most respondents who did not participate in the IVA program was lacking in attitudes, namely as many as 42 people (34.42%) but only slightly different from those who had a good attitude but did not participate in the IVA examination (32.78%). Based on the statistical test, it is known that the p -value = 0.008 > 0.05, so it can be concluded that there is no effect between attitudes and participation of women of childbearing age in the IVA method.

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- c. Distribution that the most respondents who did not participate in the IVA program with less family / husband support were 80 people (65.57%) but only slightly different from those who had good attitudes but did not participate in the IVA examination (32.78%). Based on the statistical test, it is known that the $p\text{-value} = 0.062 > 0.05$, so it can be concluded that there is no influence between husband / family support and the participation of women of childbearing age in Parbuluan District.
- d. Distribution of respondents based on Most of the people who did not participate in the IVA examination were 69 people (56.55%). Based on statistical tests, it is known that the $p\text{-value} = 0.013 < 0.05$, so it can be concluded that there is an influence between exposure and the participation of women of childbearing age.
- e. The factor that most influences women's participation in examining themselves with the IVA method is knowledge because it has the smallest p value, namely ($p = 0.011$)

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