Analysis of the Factors Influencing to Examination of Visual Acetic Inspection at Regional Public Health Dekai Yahukimo District

Ita Kudiay\(^1\), Bernard Sandjaja\(^2\), A.L. Rantetampang\(^3\), Anwar Mallongi\(^4\)

\(^1\)Magister Program of Public Health, Faculty of Public Health, Cenderawasih University, Jayapura.
\(^2\)Lecturer of Postgraduate Program. Faculty of Public Health, Cenderawasih University, Jayapura
\(^3\)Environmental Health Department, Faculty of Public Health, Hasanuddin University, Makassar

ABSTRACT

Background: Cervical cancer is the second largest cancer in the world in women aged 15-45 years after breast cancer, while in Indonesia it is in first place and in PPAu fourth place, where every hour an estimated one woman dies from cervical cancer. One interception of cervical cancer in women through early detection at the Puskesmas through Visual Acetic Acid (IVA) Inspection, but not all women are willing to HIV 1.76% at Dekai 2017 Health Center which can be used by different women officer.

Research Objectives: To Analysis The Factors Influence To Examination Of Visual Acetic Inspection At Regional Public Health Dekai Yahukimo District.

Research Method: Analytical with case control design. The population is all capital cities with a total sample of 6 people. Data obtained using questionnaires and analysis using chi square and logistic binary regression.

Results: Factors related to the examination of IVA in the work area of Dekai Yahukimo District Health Center were age (p-value 0.011; OR = 4.911; CI95% (1,533-15,732), education (p-value 0.002; OR = 6.573; CI95% (2,028 - 21,305), occupation (p-value 0.002; OR = 0.996; CI95% (0.101 - 0.861), knowledge (p-value 0.005; OR = 9.130; CI95% (0.901 43.857) and attitudes ( p-value 0.043; OR = 3,724; CI95% (1,168 - 11,872) Whereas the factor that does not lose is affordability (p-value 0,190; OR = 2,347; CI95% (0.801 6,874), Number of husbands (p-value 0.926; OR = 0.817; CI95% (0.279 - 2,394) and health workers (p-value 0.196; OR = 2.956; CI95% (0.749 - 11.666). Age and education have a dominant factor in IVA examination.

Keywords: Cervical Cancer, IVA, Women, Public Health Centre

1. INTRODUCTION

Indonesian Primary Health Research Data in 2013, the prevalence of cervical cancer was 0.8%. Riau Islands Province, North Maluku Province and D.I Province. Yogyakarta has the highest prevalence of cervical cancer which is equal to 1.5% and it is estimated that every 1 minute new cases appear and every 2 minutes a woman dies due to cervical cancer. It is estimated that every day 40-45 new cases appear, 20-25 people die, meaning that every hour an estimated 1 woman dies from cervical cancer. This means that Indonesia will lose 600-750 productive women every month (Indonesian Ministry of Health, 2015). Whereas Papua Province ranks first in 2017 with 1.3% diagnosed with cervical cancer from an estimated 98,692 cases (Papua Provincial Health Office, 2017). Data on cervical cancer patients in Yahukimo Regency is 0.3% of the number of women of childbearing age (Yuhukimo District Health Office, 2017).

Cervical cancer can be prevented by early detection. The faster it is known, the faster the treatment can be done before it gets worse. Early detection of cervical cancer can be done in primary health services such as Puskesmas by means of Visual Acetate (IVA) Inspection. The equipment needed is quite simple and does not require expensive fees by observing visual tests using 3-5% acetic acid solution on the cervix and seeing the color changes...
that occur after basting which aims to see the presence of dysplasia cells as one of the cervical cancer screening methods (Indonesian Ministry of Health, 2013).

IVA method as a method of screening cervical cancer, especially for a country with limited resources, has proven its ability to detect any cancerous lesions or pre-cancerous. Research conducted by Keshavarzi (2013) that the Visual Inspection test with Acetic Acid (IVA) had a high sensitivity and specificity value of 66.7% and 55.1%. In addition, if taken into account in terms of price and availability, the Visual Inspection test with Acetic Acid (IVA) is more affordable and more easily available than the smear Papanicolaou (Pap) test, so it can be considered as an alternative method for early detection of cervical cancer in developing countries.

Health Act No. 36 of 2009 article 161 paragraph 3 concerning Non-communicable disease health service management covers the entire spectrum of promotive, preventive, curative and rehabilitative services, which focus on early detection and treatment of non-communicable diseases. The early detection program that has been carried out in Indonesia to anticipate cervical cancer is the IVA method, which has been stated in the Decree of the Minister of Health of the Republic of Indonesia Number 796 / MENKES / SK / VII / 2010 concerning technical guidelines for controlling breast cancer and cervical cancer. The prevention of breast cancer and cervical cancer began in 2007 and was revised again through the Regulation of the Minister of Health (Permenkes) No. 34 of 2015 concerning the Management of breast cancer and cervical cancer (Ministry of Health Republic of Indonesia, 2015).

Services for early detection of cervical cancer in Yahukimo District have been held since 2015 and women who have attended IVA examinations in Yahukimo Regency until 2017 as many as 121 people in Yahukimo Regency consist of 51 Districts, 31 Health Centers including 3 health centers with health facilities and 28 non health centers care, 65 sub-district health centers (Pustu), 102 poskeskam, 3 units of mobile puskesmas (pusling) 4 wheels and 4 units of two-wheeled Puskesmas. Dekai District has 1 Puskesmas unit and 2 Assistant Health Center Units.

The number of women of childbearing age in Dekai Community Health Center in 2016 was 1,347 and 10 people (0.89%) who had taken IVA test and in 2017 there were 19 people who were examined so that they became 29 people (1.76%) who had already following the IVA test of 1,756 women of childbearing age, of whom married women of 873 people, 29 had already carried out IVA examinations. This shows that women who conducted IVA examinations were still low according to the specified target of 80% (Dekai Health Center, 2017). Based on these problems, the researcher was interested in conducting a study entitled "Factors that influence the examination of Visual Acetate Acid (IVA) inspection in the working area of Dekai District Yahukimo Health Center"

2. MATERIALS AND METHODS
A. Type of Research
This study was an observational study with a case control study design (case control study). A case control study is an epidemiological study design that studies the relationship between exposure (risk factors) to a disease or health status by comparing case groups with a control group based on their father's status. In case-control studies, effects (health status) were identified at this time, while risk factors were identified to occur in the past (retrospective) (Hasmi, 2016). In this study matching was not carried out. Matching will only force the distribution of confounding factors to be matched between the case group and the control group. Because confounding factors are always related to exposure, the matching also forces the distribution of exposure to be the same between the case group and the control group, thus reducing the estimated effect of
exposure to the disease (Swarjana, 2013). The failure to match in controlling confusion in this study was overcome by analyzing the data accordingly with multivariate analysis and stratified analysis.

### B. Time and Location of Research
This research will be carried out in the Working Area of Dekai District Yahukimo Health Center in May 2018.

### C. Population and sample

#### 1. Population
The population in this study is the object / subject that has certain qualities and characteristics set by the researcher to be studied and then draw conclusions (Sugiyono, 2013). The population in this study were all women of reproductive age who were married as many as 873 people and those who had conducted IVA examinations as many as 29 people (3.32%) in the Work Area of Dekai District Yahukimo Health Center.

#### 2. Samples
Samples are part of the number and characteristics possessed by the population (Sugiyono, 2013).

- **Observation unit**: consisting of cases and controls, is described as follows:
  - **Cases**: women of childbearing age who are married and carry out IVA examinations
  - **Control**: a woman of childbearing age who is married and has never done an IVA examination

### 3. RESEARCH RESULTS

#### 3.1 Bivariate Analysis

**a. Effect of Age on Inspection of Visual Acetate Acid (IVA)**

**Table 1. Effect of Age on Inspection of Visual Acetate Acid (IVA) at Dekai Health Center**

<table>
<thead>
<tr>
<th>No</th>
<th>Age</th>
<th>IVA Examinations</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>&lt; 30 year</td>
<td>No</td>
<td>26</td>
<td>59.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>5</td>
<td>22.7</td>
</tr>
<tr>
<td>2</td>
<td>&gt; 30 year</td>
<td>No</td>
<td>18</td>
<td>40.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>17</td>
<td>77.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>35</td>
<td>73.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>47</td>
<td>94.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

* p-value = 0.011; OR = 4.911; CI95% (1.533 – 15.732)

Table 1 shows that respondents who did the most IVA examinations at <30 years were 26 people (59.1%) higher than respondents aged > 30 years as many as 18 people (40.9%). The results of the chi square statistical test on the significance value of 95% (α = 0.05) obtained p-value 0.011 or p <α (0.05), thus there was a significant age effect on IVA examination at Dekai Yahukimo District Health Center. When viewed from the value OR = 4.911; CI95% (1,533 - 15,732) interpreted that mothers aged <30 years were more risky 4,911 times higher than conducting IVA examinations compared to respondents aged >30 years.

**b. Influence of Education on Examination of Visual Acetate (IVA) Inspection**

**Table 2. Effect of Education on Inspection of Visual Acetate Acid (IVA) Inspection at Dekai Health Center**

<table>
<thead>
<tr>
<th>No</th>
<th>Education</th>
<th>IVA Examinations</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Low</td>
<td>No</td>
<td>29</td>
<td>65.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>5</td>
<td>22.7</td>
</tr>
<tr>
<td>2</td>
<td>High</td>
<td>No</td>
<td>15</td>
<td>34.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>17</td>
<td>77.3</td>
</tr>
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<td></td>
<td></td>
<td>32</td>
<td>73.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

* p-value = 0.002; OR = 6.573; CI95% (2,028 - 21,305)

Table 2 shows that the respondents who did not carry out the most IVA examinations were as low as 29 people (65.9%) higher than the respondents who were highly educated as many as 15 people (34.1%). The results of the chi square statistical test on the significance value of 95% (α = 0.05) obtained p-value 0.002 or p <α (0.05), thus there was a significant educational effect on IVA examination at Dekai Yahukimo District Health Center. When viewed from the OR value = 6.573; CI95% (2,028 - 21,305) which was interpreted that mothers with low education were 6,573 times more at risk of not conducting IVA examinations than respondents who were highly educated.

**c. Effect of Work on Inspection of Visual Acetate Acid (IVA)**

**Table 3. Effect of Work on Inspection of Visual Acetate Acid (IVA) Inspection at Dekai Health Center**

<table>
<thead>
<tr>
<th>No</th>
<th>Occupation</th>
<th>IVA Examinations</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Work</td>
<td>No</td>
<td>15</td>
<td>34.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>14</td>
<td>63.6</td>
</tr>
<tr>
<td>2</td>
<td>Not</td>
<td>No</td>
<td>29</td>
<td>65.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>8</td>
<td>36.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>37</td>
<td>73.5</td>
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<tr>
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<td></td>
<td></td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

* p-value = 0.044; OR = 0.996; CI95% (0.101 – 0.861)
Table 3 shows that respondents who did not carry out IVA examination on working mothers were 15 people (34.1%) lower than 29 non-employed respondents (65.9%). The results of the chi square statistical test on the significance value of 95% (α = 0.05) obtained p-value 0.002 or p < α (0.05), thus there was no significant effect of work on IVA examination at Dekai Yahukimo District Health Center. When viewed from the OR value = 0.996; CI95% (0.101 - 0.861) does not cover 1, so work is a protective factor against actions in conducting IVA checks.

d. Effect of Knowledge on Inspection of Visual Acetate (IVA) Inspection

Table 4 shows that the respondents who did the most IVA examinations were well-informed about the IVA examination as many as 20 people (90.9%) higher than the respondents with less knowledge as much as 2 people (9.1%). The results of the chi square statistical test on the significance value of 95% (α = 0.05) obtained p-value 0.005 or p < α (0.05), thus there was a significant effect of knowledge on IVA examination at Dekai Yahukimo District Health Center. When seen from the value OR = 9.130; CI95% (0.901 - 43.857) interpreted that respondents who had knowledge as many as 20 people (90.9%) higher than respondents who lacked knowledge.

e. Effect of Attitudes on Inspection of Visual Acetate Acid (IVA)

Table 5 shows that the respondents who did the most IVA examinations were positive about IVA examination as many as 17 people (77.3%) higher than respondents who behaved negatively as many as 5 people (22.7%). The results of the chi square statistical test on the significance value of 95% (α = 0.05) obtained p-value 0.043 or p < α (0.05), thus there was a significant effect of attitudes towards IVA examination at Dekai Yahukimo District Health Center. When viewed from the OR value = 3.724; CI95% (1.168 - 11.872) interpreted that respondents who behaved negatively about risky IVA examination 3,724 times higher did not conduct IVA examination compared to respondents who were positive.

f. Effect of Affordability on the Visual Acetate (IVA) Inspection examination

Table 6 shows that the respondents who carried out the most IVA examinations of near-service homes were 15 people (68.2%) higher than the affordability of homes with far-reaching services as many as 7 people (31.8%). The results of the chi square statistical test on the significance value of 95% (α = 0.05) obtained p-value 0.190 or p > α (0.05), thus there was no significant effect of affordability on IVA examination at Dekai Yahukimo District Health Center. When viewed from the OR value = 2.347; CI95% (0.801 - 6.874) with a lower value covering 1, so that affordability is not significant for IVA examination.

g. Effect of Husband Support on Visual Acetate (IVA) Inspection Examination
Table 7. Effect of Husband's Support on Inspection of Visual Acetate Acid (IVA) Examination at Dekai Health Center

<table>
<thead>
<tr>
<th>No</th>
<th>Husband support</th>
<th>IVA Examinations</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Not support</td>
<td></td>
<td>14</td>
<td>31,8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>36,4</td>
<td>22</td>
</tr>
<tr>
<td>2</td>
<td>Support</td>
<td></td>
<td>18</td>
<td>68,2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>36,4</td>
<td>44</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>44</td>
<td>100</td>
</tr>
</tbody>
</table>

*p-value = 0.926; OR = 0.817; CI95% (0.279 – 2.394)

Table 7 shows that the respondents who did not carry out the IVA examination the most support from husbands who supported were 30 people (68.2%) higher than the support of husbands who did not support as many as 14 people (31.8%). The results of the chi square statistical test on the significance value of 95% (α = 0.05) obtained p-value 0.926 or p> α (0.05), thus there was no significant effect of husband support on IVA examination at Dekai Yahukimo District Health Center. When viewed from the OR value = 0.817; CI95% (0.279 – 2.394) includes 1, so husband’s support is not a risk factor for IVA examination.

h. Effect of Health Officer Support on Inspection of Visual Acetate Acid (IVA)

Table 8. Effects of Health Officers on Inspection of Visual Acetate Acid (IVA) at Dekai Health Center

<table>
<thead>
<tr>
<th>No</th>
<th>Health staff</th>
<th>IVA Examinations</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not support</td>
<td></td>
<td>14</td>
<td>31,8</td>
</tr>
<tr>
<td></td>
<td></td>
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<td>36,4</td>
<td>17</td>
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<tr>
<td>2</td>
<td>Support</td>
<td></td>
<td>30</td>
<td>68,2</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>36,4</td>
<td>49</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>44</td>
<td>100</td>
</tr>
</tbody>
</table>

*p-value = 0.196; OR = 2.956; CI95% (0.749 - 11.666)

Table 8 shows that respondents who did not carry out the most IVA examinations supported by health workers were 30 people (68.2%) higher than the support of health workers who did not support as many as 14 people (31.8%). The results of the chi square statistical test on the significance value of 95% (α = 0.05) obtained p-value 0.196 or p> α (0.05), thus there was no significant effect of health care staff support on IVA examination at Dekai Yahukimo District Health Center. When viewed from the OR value = 2.956; CI95% (0.749 – 11.666) includes 1, so that the support of health workers is not a risk factor for IVA examination.

4. DISCUSSION

Yahukimo Regency is divided into 51 Districts, 1 Village and 517 Villages. The district which is the economic and business center of Yahukimo Regency is Dekai District with an area of 520 Km2. Uneven distribution of population causes an unbalanced carrying capacity of the environment and geographically the Yahukimo Regency is divided into two, namely lowland and hilly (mountainous) areas, so that the sector development that has been carried out so far in Yahukimo Regency has not shown any improvement in terms of access to health services and in terms of service quality.

The results showed that the respondents' responses to willingness to do IVA examinations at Dekai Public Health Center were mostly or as many as 44 people (66.7%) who were not willing to conduct IVA examinations and as many as 22 people (33.3%) were willing. The results of this study are in line with the research conducted by Dewi (2016), that 31% of respondents were willing to conduct IVA examinations. IVA Test (Visual Acetate Inspection) is an examination where the examiner observes the cervix that has been given 3-5% acetic acid / vinegar acid and is seen with direct eye vision. Abnormal epithelial results will be white, if it gets white and more clearly the higher the degree of histological abnormalities (Ministry of Health of Republic of Indonesia, 2015).

1. Effect of age on inspection of Visual Acetate (IVA) Inspection

The results showed that there was a significant effect of age on IVA examination in Dekai Yahukimo Puskesmas. This study is in line with previous studies by Dewi (2016), that there was an effect of age on participation in IVA examinations. Age is a long time to live or exist since birth (Handayani and Suryani, 2013). According to Ropitasari (2014) at the age of married women it is the right age to do cervical cancer prevention early on. Whereas at an early age the early tend to be
more careful in taking action on their health and the middle adult more abstract thoughts. In general, the level of maturity in old age is more likely to carry out various healthy behaviors such as attending a health check up regularly.

Cross distribution of respondents who did not carry out the most IVA examination at <30 years old was 26 people (59.1%) higher than respondents aged >30 years as many as 18 people (40.9%) with odds ratio test results interpreted that mothers those <30 years of age are more at risk of 4.911 times higher not doing IVA examination than respondents aged >30 years. This study agrees with the theory according to Notoatmodjo (2012), that the better the knowledge the better the action taken on his health. In this case many knowledgeable women of childbearing age are willing to carry out IVA examinations.

Individuals with age <30 are not a few of those who are unable to reach maturity. This is due to the many problems it faces and is unable to overcome them. Early adulthood can develop the desire to find out new roles. When associated with health knowledge, this reflects a person's maturity to make decisions in attitudes and preventive actions of an illness (Damailia, 2015). The increasing age of the individual, the level of ability, the power to think, and work will be more mature, so that the increasing age of women will have a higher level of vigilance to prevent cervical cancer (Pangesti, 2015).

The results of this study are in line with those of Dewi (2016), that most women of childbearing age >30 years are more willing to do IVA examinations because at that age more have good knowledge. This agrees with according to Mubarak (2011) that at the age of adolescence, the power of capture or the power of thought someone more easily capture the information obtained compared to someone older. But this is influenced by the information received.

2. Effect of education on examination of Visual Acetate Acid (IVA) Inspection

The results showed that there was a significant educational effect on IVA examination at Dekai Yahukimo District Health Center. Research is in line with previous research by Finaninda (2017), revealing that there is an educational influence on women’s participation in IVA examinations. Respondents who did not carry out IVA examination at Dekai Public Health Center had the lowest level of education as many as 29 people (65.9%) higher than 15 respondents (34.1%) who were highly educated. The odds ratio test obtained OR value = 6.573; CI95% (2.028 - 21,305) which was interpreted that mothers with low education were 6,573 times more at risk of not conducting IVA examinations than respondents who were highly educated. Respondents with high school education are respondents who are already included in the middle level education, making it easier to digest a new experience and knowledge. Formal education functions as a means of empowering individuals to increase knowledge and develop their potential.

The results of this study are in line with the research conducted by Dewi (2016) that women of childbearing age who carried out IVA examinations were mostly in knowledgeable mothers who had more high school and tertiary education, but in IVA examinations the majority were low educated mothers. Education is the process of changing attitudes and behavior of a person or group of people in an effort to mature people through teaching and training (Prayoto, 2014). According to Notoadmodjo (2012), the factors that influence knowledge include education and interests and information. The higher a person's education, the easier it is for them to receive information, and ultimately the more knowledge they have. But it needs to be emphasized that someone who is low-educated does not mean low knowledge.

The assumption of the researcher that the mother's low willingness to take an IVA examination is not caused by a lack of knowledge so that interest and a low urge to do IVA examination. According to Mubarak
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(2011), one of the low interest of women in conducting health checks is due to lack of knowledge. This is also revealed by Rahma (2013) that women who have relatively low education are lacking in developing insights and following new developments, especially in the prevention of an illness (Aisah, 2013). The lower the level of individual education, the lower the interest in examining (Rahma, 2013). Low education has an impact on reasoning power or thinking power so that the information delivered is incomprehensible, so there needs to be attention from health workers in furnishing information with a language approach that is easily understood and understood by low-educated people.

3. Effect of work on inspection of Visual Acetate Acid (IVA)

The results showed that there was no significant effect of work on IVA examination at Dekai Yahukimo District Health Center. The results of this study are in line with the research conducted by Ropitasari (2014), that some mothers who did not work were mostly not doing IVA examinations. Work is something that is done to earn a living, make a living. Today women have the opportunity to work openly. The basic reason for a woman to have a marriage is not the same between one another. The reason that is commonly found is due to financial needs to enrich personal experience and knowledge, achievement (Prayoto, 2014). Respondents who did not carry out IVA examinations were higher in respondents who did not work as much as 65.9% lower than 15 working mothers (34.1%), but from the results OR values = 0.996; CI95% (0.101 - 0.861) does not cover 1, so work is not a risk factor for action in conducting IVA examinations.

The work of women of reproductive age is more in private and civil servants, but according to Finaninda's research (2017), as many as 10% of women of childbearing age are working. The majority of them conduct IVA checks more than those who do not work, this is related to the income they earn. So that mothers who do not work and have more time have time, but the distance of a distant home and low family income can influence participation in IVA examination. Work has a work environment that can provide experience and knowledge directly or indirectly, so many housewives who only relate to people around the house do not know and conduct IVA checks (Wahyuningsih, 2015). Based on the work of mothers in Dekai Public Health Center, 34.1% were willing to do IVA examination.

According to Theresia, Karningsih and Delmaifanis (2012), the work environment allows WUS to be informed about early detection of cervical cancer using the IVA examination method. In addition, work is associated with purchasing power so that women who work will be more independent and easier to check their health. From the results of the study, researchers assumed that women who did not work had more free time that could be used to make IVA visits, mothers who did not work did not mean they could not manage their time in conducting IVA examinations. This is in accordance with the opinion according to Notoatmodjo (2012), the existence of work will cause someone to spend a lot of time and energy to complete the work that is considered important.

4. Effect of knowledge on the examination of Visual Acetate (IVA) Inspection

The results showed that there was a significant effect of knowledge on IVA examination at Dekai Yahukimo District Health Center. The results of this study are in accordance with Dewi's (2016) study that knowledge of women of childbearing age about IVA examination in the good category more frequently performed IVA examinations. Knowledge was lacking in respondents because they did not know that in the IVA screening procedure the results were immediate, only waiting for about two minutes to find out the results. In addition, respondents assumed that the husband did not need to be involved in IVA examination and did not recognize one of the symptoms
of cervical cancer such as vaginal bleeding. Respondents who did the most IVA examinations were well informed about IVA examination as much as 90.9% higher than less knowledgeable respondents as much as 9.1. This shows that knowledge that is increasingly high in participation in IVA examination and from the odds ratio test results shows that respondents who lack knowledge about risk IVA examination 9,130 times higher do not do IVA examination compared to respondents who lack knowledge.

This shows that women of childbearing age who are more or less knowledgeable are not willing to take IVA examinations because the respondents do not know about the purpose and benefits of IVA examinations, conditions for taking IVA examinations and involvment of husbands and health workers conducting IVA examinations. Based on the observations of the researchers, the conditions in the Dekai Community Health Center area in terms of health personnel resources were sufficient to carry out counseling routinely in each village, because of the 13 villages, all of them already had village midwives. The obstacle is that not all midwives in the village live in the village, can be overcome by making an extension schedule. For midwives in the village who have not been trained in IVA so that they are able to carry out counseling, especially about early detection of cervical cancer, the IVA method has not been maximized, it can be overcome by conducting training / socialization on early detection of cervical cancer IVA method.

In addition, FGDs (Discussion Group Forums) can also be held for determine the right technique to improve public knowledge especially WUS and also husband / father so that it is expected that 90% of them will have good knowledge of IVA behavior. With increasing knowledge, it is expected that the target group will want to conduct an IVA examination so that it will also increase coverage. To increase the coverage of IVA services can also be carried out by inviting mothers to take part in the IVA examination conducted. Because based on experience that the majority of women are willing to take IVA examinations if invited by officers or health cadres

5. Effect of attitudes towards the examination of Visual Acetate (IVA) Inspection

The results showed that Table 4.6 shows that the respondents who did the most IVA examinations were positive about IVA examination as many as 17 people (77.3%) higher than respondents who behaved negatively as many as 5 people (22.7%). The results of the chi square statistical test on the significance value of 95% (α = 0.05) obtained p-value 0.043 or p <α (0.05), thus there was a significant effect of attitudes towards IVA examination at Dekai Yahukimo District Health Center. When viewed from the OR value = 3.724; CI95% (1,168 - 11,872) interpreted that respondents who behaved negatively about risky IVA examination 3,724 times higher did not conduct IVA examination compared to respondents who were positive.

The results of this study indicate a significant relationship between attitudes and IVA examination behavior. This is in line with the research of Dewi (2016), which states that all women who conduct an examination of early detection of cervical cancer have a positive attitude towards early detection of cervical cancer. This research is also in line with Sarini’s research (2011) which says that not all women who are positive conduct an examination of early detection of cervical cancer. Women who are positive about the value of health do not always manifest in real action (behavior), because a positive attitude will be followed by behavior which refers to someone else's experience or is based on a lot or a person's experience. Being negative about the early detection of cervical cancer, related to knowledge, they are still unfamiliar with it and do not know the purpose and benefits of IVA examination.
6. Effect of affordability of health services on the inspection of Visual Acetate (IVA) Inspection

The results showed that there was no significant effect of affordability on IVA examination at Dekai Yahukimo District Health Center. The results of this study are in line with the research conducted by Yuliwati (2012), that there was an attitude influence on women's participation in IVA examinations. The results of this study are also in accordance with Green's (1980) theory in Notoatmodjo (2011), that distance and availability of transportation as enabling factors for motivation are carried out. In addition, the Riskesdas (2013) report also states that ease of access and utilization of health services are related to several determinants, one of which is the distance of residence to health care facilities.

7. Effect of husband's support on the inspection of Visual Acetate (IVA) Inspection

The results showed that there was no significant effect of husband support on IVA examination at Dekai Yahukimo District Health Center. The results of this study are not in line with the research conducted by Dewi (2016) about women's participation in HIV testing. Women who get good social support tend to do early detection of cervical cancer. The social support in question is support from husband, family, friends and community leaders. The amount of support contributions from the closest person or group to strengthen the reason for someone to behave. If a woman does not have the closest person or group who has a good understanding of health, it will indirectly affect the woman's behavior. Therefore information about cervical cancer and the examination of early detection of cervical cancer are not only women who are the main focus, but men are also a very potential target (Sarini, 2011).

Most of the social counsels in Yahukimo District support, but the absence of influence on participation in IVA examination is due to the influence of the mothers themselves who want to take IVA examinations so that husband's support is not a risk factor for IVA examination.

Research conducted by Purba (2011) which states that an important factor in providing encouragement for mothers to carry out an examination of early detection of cervical cancer is the closest people, namely husband and family. But the decision of the mother in following the IVA examination was higher, because of the limitations of the husband getting information about the IVA examination. The importance of Puskedmas health workers in providing husband and family support is very strong in participating in IVA examinations with counseling to husbands / fathers when there are services, or other activities in each village. In addition, it can coincide when there are home visit activities such as neonatal visits, maternal visits, or other home visits, health workers or health cadres provide counseling to their husbands / fathers. However, the obstacle is that not all groups of husbands / fathers take part in other meeting activities or activities and not all husbands / fathers are at home when health workers or cadres provide counseling.

In the Dekai Health Center area, the IVA program began in 2014. From 2014 to 2017 when health workers were still actively educating the public about IVA early detection of cervical cancer, there appeared to be an increase in coverage. But since 2015 because health workers were busy with the program others who are superior, the IVA program is somewhat neglected. Increase coverage stopped until only 46% was estimated. Because staff support is very important in terms of increasing information exposure, which then becomes an increase in knowledge and ultimately increases the proportion of good IVA behavior, it is necessary to refresh IVA trained personnel and also make agreements with the head of the puskesmas for the IVA program to run. This can be done by FGD or by mini workshop.
5. CONCLUSIONS
1. There is a significant age influence on IVA examination in Dekai Yahukimo District Health Center (p-value 0.011; OR = 4.911; CI95% (1.533 - 15.732).
2. There is a significant educational influence on IVA examination at Dekai Yahukimo District Health Center (p-value 0.002; OR = 6.573; CI95% (2.028 - 21.305).
3. There is no significant effect of work on IVA examination at Dekai Yahukimo District Health Center (p-value 0.002; OR = 0.996; CI95% (0.101 - 0.861).
4. There is a significant effect of knowledge on IVA examination at Dekai Yahukimo District Health Center (p-value 0.005; OR = 9.130; CI95% (0.901 - 43.857).
5. There is a significant effect of attitudes toward IVA examination in Dekai Yahukimo District Health Center (p-value 0.043; OR = 3.724; CI95% (1.168 - 11.872).
6. There was no significant effect of husband's support on IVA examination in Dekai Yahukimo District Health Center (p-value 0.926; OR = 0.817; CI95% (0.279 - 2.394).
7. There is no significant effect of health worker support on IVA examination at Dekai Yahukimo District Health Center (p-value 0.196; OR = 2.956; CI95% (0.749 - 11.666).

REFERENCES


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