

# Risk Factors Associated with the Participation of Women of Reproductive Age (WRA) in Early Detection of Cervical Cancer Using Visual Inspection with Acetic Acid (VIA) Method in Maros Regency, Indonesia

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## ABSTRACT

**Introduction:** This study aims to determine the relationship between the participation of Women of Reproductive Age (WRA) in early detection of cervical cancer using the Visual Inspection with Acetic Acid (VIA) method.

**Methods:** This study used an analytic observational research design with a case control study design with a total sample size of 180 consisting of 90 cases and 90 controls selected by systematic random sampling method. Data analysis was carried out using STATA version 14 program.

**Results:** There is a significant relationship with the participation of WRA in early detection of cervical cancer using VIA method, namely the level of education (OR = 2.42; CI 95%: 1.26 - 4.66; p = 0.041), accessibility of public health center (OR = 2.10; CI 95%: 1.07 - 4.13; p=0.019), husband's support (OR= 8.80 (95% CI: 4.18 - 18.81; p= 0.000), the role of public health center employees (OR= 2.87; CI 95%: 5.76; p=0.001) and information media exposure (OR= 2.72; CI 95%: 1.42 - 5.20; p=0.001). The factors that were not significantly related was work (OR= 1.35; 95% CI: 0.64 - 2.81; p = 0.389).

**Conclusion:** It is necessary to improve the quality of counselling thoroughly by health workers.

**Keywords:** Cervical Cancer, Early Detection, Women of Reproductive Age, VIA Method

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## INTRODUCTION

Cervical cancer is an issue pertaining to women's health that requires serious attention. The vast majority of cervical cancers are caused by chronic human papillomavirus (HPV) infection. Through cervical cancer screening, treatment of cervical dysplasia, and HPV vaccination, cervical cancer can be prevented.<sup>1</sup>

Cervical cancer is a type of cancer that affects women and ranks fourth in the prevalence of cancer in women worldwide, affecting 569,847 individuals. In 2020, there were 604,127 new cases of cervical cancer, resulting in 341,833 fatalities.<sup>2</sup> According to the International Agency for Research on Cancer (2018), there were 512,909 cases of cervical cancer worldwide in 2018. The majority of cases occur in developing countries and are a leading cause of morbidity and mortality worldwide.<sup>3</sup>

Cervical cancer is one of the leading causes of mortality for women, resulting in at least 270,000 deaths annually worldwide, of which 85 percent occur in developing countries such as Indonesia. Cervical cancer is the second most prevalent cancer in Indonesia, after breast cancer. According to data from Globocon, (2020) the incidence of new cases of cervical cancer in Indonesia is approximately 36,633 cases (17.2% of all cancer cases in women).<sup>4</sup>

Delays in treatment contribute to the high morbidity and mortality associated with cervical cancer. Patients typically arrive at the hospital too late to be treated due to their advanced stage of illness. This is a result of late cancer detection and the general lack of awareness regarding the symptoms of cervical cancer.<sup>2</sup>

Based on the 2015 recommendations of the National Cancer Control Committee of the Indonesian Ministry of Health, Women of Reproductive Age (WRA), particularly those between the ages of 30 and 50, ought to take VIA testing every 3 to 5 years.<sup>5</sup> The VIA method, which is a screening test to find cervical cancer that is inexpensive using 3-5% acetic acid, is relatively simple, and has an accuracy of 90%.<sup>6</sup> It is also the screening method that is more feasible, affordable, and practical to be used in Indonesia.

Education provides a person with comprehensive knowledge and a well-established mindset, thereby increasing awareness of positive behavior, including a health concern.<sup>7</sup> Accessibility of WRA's residence to health facilities that provide VIA examinations is also one of the factors that encourages WRA's interest in conducting early detection of cervical cancer.<sup>8</sup>

Support from medical professionals is a driving factor in WRA participation in early detection of cervical cancer using the VIA method. WRA who have the support of health workers have a greater chance of conducting VIA examinations than those who do not.<sup>7</sup> Information obtained through exposure to in-

formation media has an effect on the factors that encourage WRA participation in the VIA test.<sup>9</sup>

By conducting this research, it is hoped that the risk factors associated with the participation of women of childbearing age in the early detection of cervical cancer with the VIA examination method can be identified. In general, this study aims to analyze the risk factors associated with WRA participation in the early detection of cervical cancer using the VIA method at the Tanralili Health Center.

## METHODOLOGY

**Ethical Considerations:** Prior to conducting this research, this research had been approved by the Hasanuddin University Health Research Ethics Committee, with a recommendation for ethical approval number 2142/UN4.14.1/TP.01.02/2023 dated 17 February 2023. Written informed consent was obtained from all research respondents with confidentiality maintained by the researcher.

**Population and Sample:** This research was conducted at the Tanralili Public Health Center in the Maros Regency of South Sulawesi Province, Indonesia. This study used an analytic observational research design with a case control study design to determine the factors associated with Women of Reproductive Age (WRA) participation in the Visual Inspection with Acetic Acid (VIA) method for early detection of cervical cancer.

In accordance with the government's target population for early detection, the case population in this study consisted of 259 WRA who are married or sexually active who had undergone early detection of cervical cancer using the VIA method in the working area of Tanralili Public Health Center, Maros Regency in 2021. In this investigation, the control population consisted of Women of Reproductive Age (WRA) who resided in the service area of the Tanralili Public Health Center in 2021 and had never used the VIA method for cervical cancer screening. This study's sample consisted of 180 WRA who resided at the research location.

The sample cases are all WRA who have carried out early detection of cervical cancer using the VIA method at the Tanralili Public Center, Maros Regency in 2021 as many as 72 people. The minimum sample of cases is determined using the Lemeshow formula.

$$n = \frac{\left\{ Z_{1-\frac{\alpha}{2}} \sqrt{2P2(1-P2)} + Z_{1-\frac{\beta}{2}} \sqrt{P1(1-P1) + P2(1-P2)} \right\}^2}{(P1 - P2)^2}$$

Where:

n = Minimum sample size

Z<sub>1-α/2</sub> = Z value at the upper limit for the 95% confidence level (1.96)

Z<sub>1-β/2</sub> = Standard normal distribution value of 80 % (0.842)

P1 = Proportion in the case group

$P_2$  = Proportion in the control group (Library) = 44% = 0.44

$$P_1 = \frac{(OR)P_2}{(OR)P_2 + (1 - P_2)}$$

The OR used was 2.693 based on research on attitude, exposure to information media and husband's support as determinants of the behavior of women of childbearing age in early detection of cervical cancer in Pontianak City.<sup>10</sup> The research displays Odds ratio analysis, the selected OR value is the OR that produces the largest number of samples.

$$p_1 = \frac{(OR)P_2}{(OR)P_2 + 1 - P_2} = \frac{(2,693)0,44}{(2,693)0,44 + 1 - 0,44} = 0,67$$

So, using the formula mentioned earlier, the calculated sample size  $n = 71,8 \cong 72$

The sample size in the study with a significance level of 5% and a power test of 80% based on the formula obtained, the minimum number of samples for each group is 72 people. To anticipate dropping out, the number of samples was added by 10% to a total of 90 people for each group.

The control sample is WRA in the working area of the Tantralili Health Center who have never conducted a VIA examination in 2021 using a comparison of the case group to the control group, namely (1: 1). By choosing a 1:1 ratio, the number of control samples was 1 time the number of case samples, namely 90 samples.

**Data collection:** The research instrument used in this study was a questionnaire made according to the research variables to be examined which included education, employment, affordability of distance to the puskesmas, husband's support, the role of puskesmas health workers and exposure to information media. This questionnaire has been tested for validity and reliability before data collection is carried out in the field so that a valid and reliable questionnaire is obtained in this study.

Testing the validity of the questionnaire in the field was carried out on respondents in the working area of the Moncongloe Health Center. This test was carried out in the working area of the Mongcongloe Health Center because this area has the same regional characteristics and respondents and the location is directly adjacent to the research site. The sample in the validity test of the questionnaire was taken 10% of the total sample.

The sampling technique in this study used the Systematic Random Sampling technique, namely the technique of taking sample members from populations that have been given serial numbers. In addition to being systematically determined that of all the subjects that can be selected, every umpteenth number of subjects is selected as a sample. This sampling technique, in which only the first element of the sample is selected randomly, while the following elements are selected systematically according to a certain pattern. The first sample unit in this study

was taken based on the serial number of the first WRA who had carried out early detection of cervical cancer with the VIA method in the registration list at the Tanralili Health Center. For the next sampling pattern, it is randomly selected according to the interval determined by the following formula:

$k = N/n$  where  $k$  is intervals;  $N$  is Total Population;  $n$  is Number of Samples

$$k = 259/90 = 2.87 = 3$$

The interview was conducted during the home visit. The interview with each respondent took approximately 10 minutes to complete. Part of the interview was recorded in the form of a written questionnaire, while the other part was recorded by the Android-based KoboToolbox platform.

### Research variable

**Education: Enough education:** if the last formal education the respondent at least graduated from high school. And low education: if the respondent's last formal education did not graduate from high school.

**Distance accessibility:** Affordable: If the distance from the WRA house to the Tanralili Health Center is  $\leq 5$  km, it is reached by motorbike or car and if it is reached on foot, the travel time is  $\leq 30$  minutes. Less accessible: If the distance from the WRA house to the Tanralili Health Center is  $> 5$  km, it can be reached by motorbike or car and if it is reached on foot, it will take  $> 30$  minutes.

**Husband Support:** All attitudes and behavior of husbands who provide support or encouragement and attention to their wives, such as: Accompanying or accompanying the mother for a VIA examination and provide encouragement, trust and active communication in encouraging the VIA examination.

**Role of health workers:** Providing support, advice, invitations to WRA aged 30-50 years by health workers at the Tanralili Health Center such as midwives, doctors, and officers holding the Non-Communicable Diseases program as well as health cadres to check themselves at the Tanralili Health Center and provide counselling about the importance of early detection cervical cancer by VIA examination method.

**Information media exposure:** Obtain information from various mass media sources about early detection of cervical cancer using the VIA examination method.

**Statistical Data Analysis:** Version 14 of the STATA program was used for data analysis. The relationship between variables was analyzed with a 95% confidence level ( $\alpha = 0.05$ ) using the Odds Ratio (OR) test for bivariate analysis and the logistic regression test for multivariate analysis.

## RESULTS

The distribution of respondent characteristics can be

seen in the table1. Of the 180 respondents in this study, 123 (68.33%) belonged to the WRA age group between 30 and 50 years old. This age group is the recommended age group for WRA to perform VIA examination. As many as 98 respondents (54,44%) in the case and control groups had children (one to two children).

As many as 120 respondents (66.66%) were in the age group between 20 and 30 years old at the time of their first marriage. The case group consisted of 65 WRA who married for the first time between the ages of 20 and 30 whereas the control group consisted of 55 WRA (61.11%). 90 of the 180 research participants had performed VIA examination. The majority of respondents went to take their VIA tests at alternative locations. A total of 56 respondents (62.23%) reported that they did the examination in other locations, such as the cadre's residence, the head of hamlet's residence, the integrated health center, and the village hall. As many as 48 respondents (26.68%) in this study had spouses who worked as civil servants/Army/Police/SOE Employee/ROE Employee.

Table 2 reveals that the percentage of WRA respondents with an enough level of education was greater than those with a lower level of education: 105 (58.33%). WRA with an enough level of education were more prevalent in the case group (68.89%) than in the control group (47.78%) (62 compared to 43).

The majority of WRA respondents in this study did not work/were housewife, with 135 respondents (75%) compared to only 45 respondents (25%) who worked. WRA who did not work/were a housewife took more VIA examinations, a total of 65 respondents (72.22%), compared to only 25 WRA who worked (27.78%).

In this study, Respondents with the accessible distance was larger in the case group for as many as 66 respondents (73.33%) than in the control group as many as 51 respondents (56.67%).

The majority of the WRA received sufficient spouse support. There were more respondents in the case group, 74 (82.22%), than in the control group, 31 (34.44%).

The health center health workers played a role in supporting WRA to participate in VIA examinations, as shown in table 4.2, the group that had VIA received support from staff health care was 69 respondents (76,67%) and 21 respondents (23,33%) lacked support from health workers.

The majority of WRA who were exposed to information media were in the case group, with 54 respondents (60%) in comparison to 32 respondents (35.56%) in the control group.

**Table 1: Characteristics of Research Respondents in the service area of Tanralili PHC, Maros Regency**

Respondents Characteristics	Cases (%)	Control (%)	Total (%)
<b>Age of Respondents</b>			
<29 years old	19 (21.11)	29 (32.22)	48 (26.67)
30-50 years old	67 (74.44)	56 (62.22)	123 (68.33)
>51 years old	4 (4.45)	5 (5.56)	9 (5)
<b>Number of Children</b>			
None	4 (4.44)	7 (7.78)	11 (6.11)
1-2	52 (57.78)	46 (24.44)	98 (54.44)
3-4	31 (34.44)	33 (36.67)	64 (35.56)
≥5	3 (3.33)	4 (4.44)	7 (3.89)
<b>Age at first marriage</b>			
<19 years old	24 (26.67)	33 (36.67)	57 (31.67)
20-30 years old	65 (72.22)	55 (61.11)	120 (66.66)
>31 years old	1 (1.11)	2 (2.22)	3 (1.67)
<b>VIA Screening Location</b>			
No Screening	0 (0)	90 (0)	90 (50)
Public Health Center	30 (33.33)	0 (0)	30 (16.67)
Auxiliary Health Center	3 (3.33)	0 (0)	3 (1.66)
Clinics	1 (1.11)	0 (0)	1 (0.56)
Integrated health center	7 (7.78)	0 (0)	7 (3.89)
ARMY official housing complex	25(27.78)	0 (0)	25(13.89)
Village office	4(4.44)	0 (0)	4(2.22)
Health cadre house	1(1.11)	0 (0)	1(0.56)
<b>Husbands' Occupation</b>			
PNS/ARMY/POLICE/SOE/ROE	41 (45.56)	7 (7.78)	48 (26.68)
Private-sector Employee	8 (8.89)	19 (21.11)	27 (15)
Entrepreneur	13 (14.44)	20 (22.22)	33 (18.33)
Farmer/Farm Labor	18 (20)	26 (28.89)	44 (24.44)
Labor/Driver/Domestic Worker	8 (8.89)	14 (15.56)	22 (12.22)
Others	2 (2.22)	4 (4.44)	6 (3.33)

Source: Primary Data 2023

Note: Others :(at the cadre's house, hamlet head's house, posyandu and village hall)

**Table 2: Results of Bivariate Analysis of Factors Associated with WRA Participation in Early Detection of Cervical Cancer Using the VIA Method**

Research Variable	Case (%)	Control (%)	P Value	Odds Ratio (OR)	CI 95%
<b>Education</b>					
Enough Education	62 (68.89)	43 (47.78)	0.004	2.42	1.26-4.66
Low Education	28 (31.11)	47 (52.22)			
<b>Occupation</b>					
Employed	25 (27.78)	20 (22.22)	0.389	1.34	0.64 -2.81
Not Employed	65 (72.22)	70 (77.78)			
<b>Distance accessibility</b>					
Accessible	66 (73.33)	51 (56.67)	0.019	2.1	1.07 - 4.13
Less Accessible	24 (26.67)	39 (43.33)			
<b>Husband Support</b>					
Sufficient	74 (82.22)	31 (34.44)	0.000	8.80	4.18 - 18.81
Insufficient	16 (17.78)	59 (65.56)			
<b>Role of health workers</b>					
Supporting	69 (76.67)	48 (53.33)	0.001	2.87	1.44 - 5.76
Not supporting	21 (23.33)	42 (46.67)			
<b>Exposure to information media</b>					
Exposed	54 (60)	32 (35.56)	0.001	2.71	1.42 - 5.20
Unexposed	36 (40)	58 (64.44)			

Source: Primary Data 2023

**Table 3: The results of multivariate analysis of factors associated with the participation of WRA in early detection of cervical cancer using the VIA method**

Variable	Coeff	p-value	Adjusted Odds Ratio (AOR)	CI 95%
Husband's Support	2.175027	0.000	8.80	4.39 - 17.61

Source: Primary Data 2023

Five of the six variables have a significant association in this study, as shown in Table 2. These five variables are the level of education, the accessibility of public health centers, husband support, the role of health workers, and media exposure. The OR value of 2.42 (CI 95%: 1,26-4,66) with a p-value of 0.004 indicates an association between education level and the WRA participation in the early detection of cervical cancer using the VIA method, while the lower limit and upper limit (LL-UL) values are below 1. Location accessibility showed an OR value of 2.10 (CI 95%: 1.07 - 4.13) with a p value of 0.019, and the value of the lower limit and upper limit (LL-UL) are lower than the value of 1. The variable husband's support has an OR value of 8.80 (95% CI: 4.18 - 18.81) with the lower limit and upper limit (LL-UL) values do not include the value 1. The OR value for the role of health workers was 2.87 (CI 95%: 1.44 - 5.76), with a p value of 0.001, and the lower limit and upper limit (LL-UL) are smaller than the value of 1. Exposure to information media resulted an OR value of 2.72 (CI 95%: 1,42 - 5,20) with a p value of 0.001, and the lower limit and upper limit (LL-UL) are below 1.

According to table 2, the occupation variable has an OR value of 1.34 (95% CI: 0.64-2.81) with a value reaching 1 for the lower limit and upper limit (LL-UL). This indicates that the occupation of WRAs is not significantly associated with their participation in early detection of cervical cancer using the VIA method. Therefore, it can be concluded that WRA

with a job have a 1.35 times probability of participating in early detection of cervical cancer using the VIA method, despite the fact that this occupation factor is not statistically significant.

Multivariate analysis was carried out to find out which independent variable had the greatest influence on the dependent variable, and to find out whether the independent variables were related to whether WRA participation in early detection of cervical cancer using the VIA method was influenced by other variables or not. This analysis uses a multiple logistic regression test with a stepwise method, at a significance level of 95%, using the STATA version 14 tool. The reason for using this test is to be able to select the independent variable that has the most influence, if tested together with other independent variables on WRA participation in early detection of cervical cancer with the VIA method. Independent variables that have no effect will automatically be excluded from the calculation.

Multivariate results using a stepwise method show that there is one independent variable that must be maintained statistically, namely husband's support.

In table 3 above, the results of the multivariate test show that there is one variable that still has a significant risk for WRA participation in early detection of cervical cancer using the IVA method, namely the husband's support variable.

## DISCUSSION

Based on the findings of this study, it has been found that in the working area of the Tanralili Public Health Center, Maros Regency, WRA with a sufficient level of education are more likely to participate in early detection of cervical cancer using the VIA method compared to WRA with a lower level of education. In this study, 68.89% of respondents had VIA checked had a sufficient level of education, while 31.11% had a low level of education.

This study discovered a significant correlation between education level and WRA participation in cervical cancer early detection using the VIA method. This is further supported by Nurtini (2016) research suggesting that the majority of WRA who took the VIA test had a secondary education (SMA or equivalent). Education is closely associated with knowledge, which influences an individual's perspective on health. The level of education of a society influences the comprehension of health information it acquires. The greater the level of education, the greater the comprehension of information.<sup>11</sup>

Formal education serves as a means of empowering individuals to increase their knowledge and develop their potential; consequently, WRA with relatively high levels of education will always increase their knowledge and follow new developments, particularly in disease prevention.<sup>12</sup> Education is closely associated with knowledge, which influences an individual's perspective on health. The level of education of a society influences the comprehension of health information it obtains. The greater the level of education, the greater the reception of information. The greater the knowledge of WRA, the greater the participation in conducting VIA tests.<sup>13</sup>

Based on the findings of this study, the accessibility of the health center has a significant relationship with WRA participation in early cervical cancer detection using the VIA method. More WRA in the case group (73.33%) lived within a reasonable distance of the Tanralili Health Center than in the control group (56.67%). More WRA in the control group (43.33%) had less distance accessibility than in the case group (26.67%). According to research conducted in Lampung, there is a significant correlation between the convenience of access and reachability of distance to health care facilities and the VIA testing participation. With a *p*-value of 0.0, the study revealed that access to and utilization of health services are related to the distance between the residence and the health service facility.<sup>14</sup>

Distance is the route that an individual must travel from one location to another. A person's propensity to engage in health-related behaviors is significantly influenced by their geographical location. The closer the distance, the more favorable it is for a person to visit health services; conversely, the further the distance, the more difficult it is for a person to visit health services. It is necessary to enhance coordina-

tion between regional health centers and auxiliary health centers or health cadres in order to reach WRA in various parts of the region.<sup>8</sup> In contrast, another study found no statistically significant correlation between access and the utilization of VIA testing. This is due to the lack of awareness among Women of Reproductive Age about the cervical cancer early detection program using the VIA examination. Although the distance, travel time, and transportation costs are affordable, the WRA will not utilize the service if they are uninformed about the VIA examination and where to obtain it.<sup>15</sup>

The majority of the study's health center workers supported WRA to carry out VIA examinations, and this was more commonly seen in the case group (76.67%) than in the control group (53.33%). More respondents in the control group (46.67%) felt that the role of health center health workers was less helpful than respondents of the case group (23.33%). In line with the findings of this study, similar studies conducted in low- and middle-income countries, such as Tanzania, indicate that the participation of WRA in cervical cancer early detection is correlated with the role of health workers.<sup>16</sup>

Women who had been informed by medical professionals about cervical cancer early detection were more likely to use the VIA method than women who had not been informed. This finding is supported by a study conducted in rural Uganda revealing that health worker information raises awareness of cervical cancer and the importance of VIA screening services.<sup>17</sup> As a means to increase women's knowledge and interest, the role of medical professionals is crucial. Through health counselling, health professionals are expected to provide WRA with information regarding the early detection of cervical cancer using VIA screening.<sup>18</sup>

Getting the support of health professionals, who have a role in improving the quality of optimal health services for the community, is essential so that the community can increase its awareness, willingness, and capacity to live a healthy lifestyle and achieve the highest level of health.<sup>19</sup> Individual compliance behavior can be influenced by the role of professional health workers. This assistance is useful for promoting healthy behavior in individuals. Health professionals can also influence individual behavior by conveying enthusiasm for particular actions and by offering positive incentives to people who are able to participate in health programs.<sup>20</sup>

The majority of WRA who were exposed to information media were in the case group (60%) in contrast to the control group (35.56%). 64.44% of WRA who were less exposed to information media were in the control group, while only 40% were in the case group. Women between the ages of 30 and 50 are already aware of the VIA method, but they require input from both print and electronic media to obtain additional information, thereby increasing their in-

terest in conducting early detection of cervical cancer using the VIA method.<sup>18</sup>

Many WRA who do not take VIA examination sessions are influenced by the lack of information media used or obtained, resulting from a sense of ignorance about health, believing that if there are no complaints, WRA do not require a VIA examination.<sup>21</sup> Easy access to information will facilitate changes in health behavior, particularly the implementation of cervical cancer screening. One can gain access to information through electronic media, printed media, the internet, etc.<sup>22</sup>

To maximize access to information received by WRA, in addition to print and electronic media, information can also be obtained most effectively through counselling. Counselling can be administered formally (through socialization) or informally (through social gatherings and women's religious groups, for example). Stakeholders must increase the intensity of socialization about cervical cancer and early detection of cervical cancer using the VIA method in order to increase community access to information.

According to the findings of this study, the occupation of WRA has no influence on their participation in the VIA method for early detection of cervical cancer. Researchers assume that non-working WRA have more leisure time that can be used to conduct VIA examinations, and that non-working mothers have sufficient knowledge obtained primarily from health cadres. Meanwhile, working WRA are more concerned with earning money to meet their everyday needs than taking VIA examinations, which are terrifying if the results are revealed. Therefore, a person's employment status has no impact on her ability to gain and expand the insight and knowledge necessary for taking a VIA test. In accordance with the findings of this study, other research indicates that a working woman spends more time at work and does not schedule a VIA examination.<sup>23</sup>

The majority of WRA in the working area of the Tanralili Health Center have spouses who are civil servants, army, police, state-owned enterprises employee, or regionally-owned enterprises employee. 45.56% of respondents in the case group and 7.78% of respondents in the control group chose this option for their husband's occupation. The results of this study indicate that 45.56 percent of the mothers who underwent early detection with the VIA method were spouses of civil servants, army, police, state-owned enterprises employee, or regionally-owned enterprises employee. Compared to housewives, private employees, and self-employed respondents, participants who work as civil servants, army, and police officers have a higher probability in participating early detection of cervical cancer. This is a result of the level of education and discipline implemented at work, which is also used to improve their health.<sup>24</sup>

There is a significant relationship between the husband's support variable and WRA participation in early detection of cervical cancer using the VIA

method. The findings of this study are consistent with studies in lower middle-income countries, such as research from India which shows that the absence of spousal support affects the exclusion of wives in early detection of cervical cancer. India's National Family Health Survey revealed that in the state of Karnataka, a very small percentage of couples (4.6%) are aware of early cervical cancer detection procedures, and more than half (56.5%) are unaware that regular early detection is very important.<sup>25</sup>

In this study, as many as 31 respondents (34,44%) WRA who receive sufficient support from their husbands in carrying out early detection of cervical cancer but do not carry out examinations because they are afraid of the results of the VIA examination. In the opinion of the researchers, this happened because of how much support the husband had for the mother in carrying out VIA examinations but the decision making for the mother's health was herself so that various reasons such as the mother's lack of desire, embarrassment, fear of the examination results, and the mother's indifference because she felt don't have symptoms that lead to cervical cancer, which causes this to happen. This is supported by research which states that husband's support does not guarantee that the wife or WRA will take part in the VIA examination.<sup>24</sup>

Other research that supports the results of this study states that husband's support is a form of reinforcing factor, where the greater the support the wife gets for carrying out an IVA examination, the more likely there will be changes in the wife's behavior in carrying out IVA tests regularly.<sup>26</sup>

## CONCLUSION

Husband's support is a risk factor that has the most significant relationship with 8.80 times the risk participation WRA in early detection of cervical cancer with the VIA method in the working area of the Tanralili Health Center, Maros Regency. From the results of this study, husband's support has an important role in the participation of WRA in conducting VIA examinations. With the husband's permission and advice, the mother/respondent was even more interested in carrying out VIA examinations. Of course, husband's support must also be accompanied by awareness from mothers of the importance of this early detection effort.

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