

FACTORS ASSOCIATED WITH CERVICAL CANCER SCREENING IN WOMEN OF REPRODUCTIVE AGE
USING VIA METHODLydia Sihotang^{1*}, Mala Kurniati², Dhiny Easter³, Anita Bustami⁴, Nova Muhani⁵^{1,3,5}Master of Public Health Study Program, Faculty of Health Sciences, Malahayati University²Medical education study program, Faculty of Medicine, Malahayati University⁴Tanjung Karang Health Polytechnic

Corresponding author: Mala Kurniati. *Email: mala_kurniati@malahayati.ac.id

Disubmit: 09 Januari 2025

Diterima: 28 Oktober 2025

Diterbitkan: 01 November 2025

Doi: <https://doi.org/10.33024/mahesa.v5i11.19053>

ABSTRACT

Cervical cancer is a malignant tumor that grows in the cervical area (cervix). In 2022, in South Lampung Regency, of the 11,077 women of reproductive age who underwent VIA screening, 19 (0.2%) tested positive. This study aimed to determine the factors associated with cervical cancer screening in Women of Reproductive Age (WRA) using the Visual Inspection with Acetic Acid (VIA) method. Quantitative research with a cross sectional approach, the sample of this study was 210 coupled female respondents aged 30-50 years who were of reproductive age. Bivariate analysis uses the chi square test and multivariate analysis uses logistic regression. There is a relationship between knowledge (p-value = 0.001, OR = 6.238), motivation (p-value = 0.001, OR = 7.667), the role of health workers (p-value = 0.007, QR = 4,091), and husband's support (p-value = 0.001, OR = 9,625) with cervical cancer screening using the VIA method. There is no significant relationship between the affordability of access to cervical cancer screening using the VIA method (p-value = 0,446, QR = 1,562). The husband's support variable is the dominant factor, with a p-value of 0.001 and an OR of 9,625. All variables influence women of reproductive age's behavioral tendencies in cervical cancer screening, such as knowledge, motivation, the role of health workers, and husband's support (p value <0.05), except the affordability of access has no significant relationship. The influence of husband's support is the most dominant factor.

Keywords: Cervical Cancer, VIA, and Women of Reproductive Age.

INTRODUCTION

A malignant growth that develops in the cervical region is called cervical cancer. According to Bouvard, cervical cancer ranks second globally in terms of both incidence and cause of death for women of reproductive age (Bouvard et al., 2021). Roughly 90% of the 270,000 cervical cancer-related deaths that year happened in low and middle-income nations, with Indonesia ranking first among them (WHO, 2021). Approximately, 70% of cases of cervical cancer are often detected at an advanced stage (Sheria, 2021). An increased risk of precancerous lesion was linked to older age, a history of several sexual partners, and

sexually transmitted illnesses. Therefore, more screenings should be advocated for women who have a higher risk of precancerous lesions (Abera et al., 2023; Castillo et al., 2016; Teame et al., 2018).

According to estimates from the American Cancer Society, there will be roughly 13,240 new cases of invasive cervical cancer in the US in 2021, and 4,170 women will likely lose their lives to the disease (American Cancer, 2022). Cervical cancer is very common and has multiple causes. A few of the reasons why appropriate screening programs have not been successfully implemented are inadequate access to

cervical cancer screening and treatment programs due to a lack of skilled specialists (i.e., pathologists, gynecologists), clinic infrastructure, and transportation for women to visit the clinic (Firnhaber, 2016). The effectiveness and durability of these interventions will be ensured by giving careful consideration to these hurdles when putting novel strategies to control cervical cancer morbidity and mortality into practice (Mittal, 2023). Education campaigns should urge women between the ages of 30 and 49 to screen for cervical cancer at least once in their lifetime, as recommended by the WHO. Asymptomatic women are the ones who prefer to be screened. Since the provision of services by itself is insufficient to enable screening, steps should be taken to improve their acceptance by publicizing them, such as through the use of mobile health (mHealth) and mass media like radio and television (Løkke et al., 2022; Ndejjo et al., 2017; Okyere et al., 2022).

In affluent nations, cervical cancer rates have been successfully lowered through cervical cancer screening (Orang'O, 2016). The creation and assessment of screening has been the main focus of work over the past ten years to lower the incidence of cervical cancer worldwide through screening. VIA presents significant potential benefits because of its straightforward process, instantaneous results, and the ability to deliver cryotherapy treatment on the same visit often (Almonte et al., 2015; Poli et al., 2015). Using a 3-5% acetic acid solution on the cervix, the Visual Inspection with Acetic Acid (VIA) Test detects color changes that may be a sign of cervical cell dysplasia (Kemenkes, 2021). Studies have demonstrated that the VIA test is a valid screening tool for precancerous lesions due to its high sensitivity and specificity (Rodiani et al., 2019). Ministerial Regulation No. 29 of 2017 is the regulation that governs the VIA examination. It emphasizes curative, rehabilitative, and palliative health services, as well as promotive and preventive aspects, from community-targeted programs and individual initiatives, carried out comprehensively, effectively, and efficiently (Permenkes, 2017).

The habit of taking VIA exams is influenced by some variables, such as enabling, reinforcing, and predisposing aspects (knowledge, attitudes, etc.) (Notoatmodjo, 2014). Mother's VIA test participation is related to several aspects, including knowledge, intentions, and attitudes. Positive attitudes among women increase the likelihood of VIA testing compared to negative attitudes. Misconceptions about cervical cancer screening can have an impact on participation, according to research, such as the idea that women with hazardous sexual habits are the only ones affected by the disease or that testing is unnecessary since symptoms are not present. Women continue to participate in VIA testing at a low rate, which means that most cases are discovered at an advanced stage, decreasing the likelihood of recovery (Fathurrohman, 2019).

With 227 cases, Lampung Province ranks third among the 1,739 women suspected of having cervical cancer in 2021, behind DKI Jakarta (269 cases) and Bali (254 cases) (Kemenkes, 2021). Despite having a sizable target population of women of reproductive age (WRA), preliminary surveys carried out at Karanganyar Community Health Center over the last three years (2021-2023) show that the number of Visual Inspection with Acetic Acid (VIA) screenings is lower than the district average for South Lampung. At Karanganyar Community Health Center, just 0.88% of WRAs received VIA screenings in 2021; by 2022 and 2023, this percentage had increased to only 2.8% and 9.05%, respectively. In contrast, the percentage of WRAs who received VIA screening at Sidomulyo Community Health Center was 6.1% in 2022 and increased to 20.2% in 2023, whereas the percentage at Way Urang Community Health Center was 7.2% in 2022 and 12.04% in 2023.

With 227 cases, Lampung Province ranks third among the 1,739 women suspected of having cervical cancer in 2021, behind DKI Jakarta (269 cases) and Bali (254 cases) (Kemenkes, 2021). Even though monthly educational and screening sessions are planned for every Pekon or Village in the Karanganyar area, the willingness of WRAs to

be screened for cervical cancer using the VIA method is extremely low, according to the coordinating midwife and the physician in charge of the VIA program at Karanganyar Community Health Center. Twelve WRAs were interviewed at the health center; of them, three had had VIA screening one or two years prior, eight had never been checked, and one had had her screening delayed because of her menstrual cycle. Individuals who had not undergone screening stated they were unaware of VIA and cervical cancer. Thus, the purpose of this study is to learn more about the factors that contribute to WRAs' poor VIA screening participation.

LITERATURE REVIEW

A health promotion intervention is created and put into practice, with a particular focus on older women, women with lower levels of education, and women living in less developed areas (Di, 2015). Health education is one strategy to foster health-promoting habits in the community by improving knowledge, attitudes, and behaviors. Participation in VIA testing is a behavioral outcome influenced by various factors including predisposing factors, enabling factors, and reinforcing factors. Predisposing Factors, are factors that facilitate and underlie the occurrence of certain behaviors. These factors include knowledge, attitudes, beliefs, convictions, age, education level, and occupation. Enabling Factors, are factors that enable a person to utilize health services. These factors include the availability of health facilities and infrastructure for the community such as: hospitals, health centers, polyclinics, integrated health posts, village health posts, private doctors or midwives, the accessibility of health services both in terms of distance and cost and social, the existence of regulations and community commitment in supporting certain behaviors. Reinforcing Factors, are factors that strengthen the occurrence of certain behaviors. These variables include the attitudes and actions of religious and community leaders as well as the attitudes and actions of law enforcement personnel,

including medical professionals. People behave primarily based on their attitudes, which are evaluative predispositions, yet attitudes and actual behaviors are frequently extremely different. This is due to the fact that real behaviors are influenced by a variety of outside circumstances in addition to attitudes (Green, 2005).

According to the foregoing explanation, the author is interested in studying the variables surrounding the visual inspection method with acetic acid (IVA) for cervical cancer screening in women of reproductive age in the Karang Anyar Health Center, South Lampung, in 2024.

METHOD

The research period for this quantitative study was May 2024, and it was carried out at the Karanganyar Community Health Center in South Lampung. The survey is cross-sectional and is analytical in design. A sample of 210 women who were of reproductive age was taken; the inclusion criteria included being between the ages of 30 and 50, being willing to participate, having an active sexual relationship, and being married. Pregnancy, menstruation, and an ongoing cancer diagnosis were the exclusion criteria. Knowledge, drive, involvement of healthcare workers, accessibility, and spouse support are examples of independent variables. Participation in VIA-based cervical cancer screening is the dependent variable. The process of gathering data involved giving questionnaires to the respondents directly.

Codes 0 for good and 1 for poor are used for knowledge; 0 for strong and 1 for weak is used for motivation; 0 for positive and 1 for negative is used for healthcare worker involvement; 0 for easy and 1 for difficult is used for accessibility; 0 for positive and 1 for negative is used for spousal support; and 0 for tested and 1 for not tested is used for participation in VIA testing. A 15-question questionnaire was used to measure knowledge, with answers being classed as good (scoring >50%) or poor ($\leq 50\%$). Twenty questions were used to gauge motivation, and the results were divided into two

categories: negative (if the score is $\leq$ the mean) and positive ($\geq$ mean).

A total of sixteen questions were used to evaluate the function of healthcare personnel; a score of $\geq$ mean indicated influence, while a score of $<$ mean indicated no influence. There were fifteen questions in the analysis of the influence of spousal support; a score of $\geq$ mean indicated influence, while a score of $<$ mean indicated no influence. Three questions measuring accessibility were used; the answers were classified as easy (if the score is ≥ 2) or difficult (if the score is < 2). Statistics, such as univariate, bivariate, and multivariate statistical tests, were used in the data analysis procedures of this quantitative investigation.

The r table value for the validity and reliability tests, which were conducted from April 20-23, 2024, and had the same

characteristics as the research sample of 30 respondents, was 0.361. Because there were no values below 0.361, valid and trustworthy answers were obtained from all surveys. The Ethics Committee of Malahayati University, Lampung, has accepted this research with decision number 4286/EC/KEP-UNMAL/V/2024, dated 17 Mei 2024.

RESULTS

210 WRAs in Karanganyar were the respondents chosen for this investigation. WRAs can serve as a sample for unintentional technique sampling, which is sampling based on needs and who WRAs encounter with researchers at the research location. Data was directly collected through fieldwork. This study was categorized according to age, level of education, and profession.

Table 1. Respondent Characteristics (N= 210)

Changeable	Classification	The Frequency (n)	The Percentage (%)
Age	30-40	74	35,7
	41-50	135	64,3
Education Level	Primary	0	0
	Secondary	54	25,7
	Tertiary	133	63,3
	College/University	23	11,0
Employment	Civil Servant	9	4,3
	Instructor / Lecturer	3	1,4
	Entrepreneur / Trader	37	17,6
	Employees	10	4,8
	Labor	3	1,4
	Unemployed	148	70,5
Sample Size		210	100.0

Table 1 shows that there were 210 respondents studied. In the age variable, the results showed that those aged 30-40 years were 35.7%, and those aged 41-50 years were 64.3%. Age is one of the elements that greatly affects the condition of a person such as resistance to disease, birth, death, education, the way of thinking or other economic activities. The highest level of education is high school were 63.3%, junior high school 25.7%, and bachelor's degree 11%. The level of

education is related to a person's mindset and attitude, the higher the level of one's education, the higher one's knowledge level will be. A person's level of education can influence a person in making decisions.

Most respondents work as housewives (not working) 70.5%, as traders 17.6%, employees 4.8%, civil servants 4.3%, laborers 1.4%, and teachers 1.4%. Women who work can interact with colleagues, exchange information, and motivate each other. This can expand knowledge and

information. Women who don't work may spend more time at home, doing home activities or personal affairs, so there are

fewer opportunities to interact with other people.

Table 2. Relationship Between Independent Variables and Dependent Variables

Variable	Sample Size	Levels	Total (n, %)	Uptake of Screening		P value	OR (95% CI)
				Yes (n, %)	No (n, %)		
Knowledge (n, %)	210	Good Poor	70 (33,3%) 140 (66,7%)	21 (30%) 9 (6,4%)	49 (70%) 131 (93,6%)	0.001	6.238 (2.674-14.552)
Motivation (n, %)	210	Strong Weak	77 (36,7%) 133 (63,3%)	23 (29,9%) 7 (5,3%)	54 (70,1%) 126 (94,7%)	0.001	7.667 (3.104-18.935)
Role of health workers (n, %)	210	There is support No support	124 (59%) 86 (41%)	25 (20,2%) 5 (5,8%)	99 (79,8%) 81 (94,2%)	0.007	4.091 (1.499-11.166)
Accessibility (n, %)	210	Easy Difficult	145 (69%) 65 (31%)	23 (15,9%) 7 (10,8%)	122 (84,1%) 58 (89,2%)	0.446	1.562 (0.634-3.850)
Husband support (n, %)	210	There is support No support	62 (29,5%) 148 (70,5%)	22 (35,5%) 8 (5,4%)	40 (64,5%) 140 (94,6%)	0.001	9.625 (3.984-23.256)

Table 2 reveals that among 70 women of reproductive age (WRA) with good knowledge, 30% underwent the VIA test while 70% did not. Only 6,4% of WRA with poor knowledge opted for the VIA test, whereas 93,6% declined to participate. Chi-square test results indicate a significant association between knowledge and the behavior of WRA undergoing VIA testing (p-value = 0.001), with an odds ratio (OR) of 6.2 and a 95% confidence interval (CI) of 2.6-14.5. This suggests that WRA with good knowledge are 6.2 times more likely to undergo VIA testing compared to those with poor knowledge.

Of the 77 respondents with strong motivation, 29.9% underwent VIA testing, while 70.1% did not. Among WRA with weak motivation, 5.3% underwent testing, and 94.7% did not. Chi-square test results show

a significant relationship between motivation and VIA testing behavior among WRA (p-value = 0.001), with an OR of 7.6 and a 95% CI of 3.1-18.9, indicating that strongly motivated respondents are 7.6 times more likely to undergo cervical cancer screening via the VIA method compared to those with weak motivation.

A total of 124 respondents, or 20.2%, with support from healthcare workers underwent VIA testing, while 79.8% did not. Among respondents without support from healthcare workers, 5.8% underwent VIA testing, while 94.2% did not. Chi-square test results demonstrate a significant association between the role of healthcare workers and WRA's behavior in undergoing VIA testing (p-value = 0.007), with an OR of 4.0 and a 95% CI of 1.5-11.1. This result can be interpreted to mean that respondents

with healthcare worker support are four times more likely to undergo VIA testing compared to those without such support.

Among 145 respondents with easy access, 23 (15.9%) underwent VIA testing and 122 (84.1%) did not. Among 65 respondents with difficult access, 7 (10.8%) underwent testing and 58 (89.2%) did not. Statistical tests yielded a p-value of 0.446, indicating no significant association between access and VIA testing ($p > \alpha = 0.05$, rejecting H_a and accepting H_o).

Among 62 respondents with spousal

support, 22 (35.5%) underwent VIA testing and 40 (64.5%) did not. Among 148 respondents without spousal support, 8 (5.4%) underwent testing and 140 (94.6%) did not. Statistical tests yielded a p-value = 0.001, indicating a significant relationship between spousal support and VIA testing ($p < \alpha = 0.05$, accepting H_a and rejecting H_o). With an OR of 9.6 and a 95% CI of 3.9-23.2, respondents with spousal support are 9.6 times more likely to undergo VIA testing compared to those without spousal support.

Table 3. Final Model of Logistic Regression

Variable	Sig.	OR	95% C.I. for OR	
			Lower	Upper
Knowledge	,003	4,089	1,635	10,226
Motivation	,072	2,478	,923	6,650
Husband's support	,001	4,729	1,820	12,288
The role of health workers	,150	2,262	,745	6,868

Based on Table 3, it can be seen that the variables that have a p-value < 0.05 are the variables of knowledge and husband's support. From these two variables, it is known that the highest OR value is found in the husband's support variable, 4.729, so it

can be concluded that in this study husband's support is the most dominant variable after being controlled by the variables of knowledge, motivation and the role of health workers.

DISCUSSION

Based on the statistical test results, a significant link between knowledge and cervical cancer screening among women of reproductive age was found, with a p-value of 0.001, meaning that $p < \alpha = 0.05$ (H_a accepted and H_o refused), with an odds ratio (OR) of 6.2. These results are consistent with Apriyanti's research (Apriyanti et al., 2020), which used the VIA approach to show a relationship between knowledge and cervical cancer screening (p-value = 0.011, OR = 7.438, 95% CI = 1.566-35.332). Comparably, Carolin's study discovered a strong correlation between screening for cervical cancer and knowledge ($p = 0.000$, OR = 18.632) (Carolin, 2022). Ferdina's study revealed a substantial correlation between knowledge

about the test and the willingness to get tested for VIA in Campurejo, Kediri City, with a correlation coefficient (r) of 0.358 and a p-value < 0.05 (Ferdina, 2019).

Knowledge positively affects VIA exams; women who know more are more willing to administer VIA evaluations (Kurniawati, 2021). The majority of earlier studies discovered that healthy women's low screening rates are influenced by their lack of information and attitude (Khomphaiboontij, 2023). According to a related Addis Ababa study, the majority of women did not get screened because they did not exhibit any symptoms or had insufficient knowledge. They declared that disorders exhibiting symptoms are given precedence (Getachew, 2019).

According to researchers, several factors may contribute to some respondents not undergoing VIA testing. These factors include difficult access from home to the community health center, lack of spousal support, insufficient motivation, or inadequate performance by healthcare workers. Even if respondents possess good knowledge, the absence of these supporting factors can influence their behavior toward undergoing VIA testing. One determinant of knowledge level is information. Individuals with access to more information sources tend to have broader knowledge. Such information can be obtained from various sources including television, radio, newspapers, community health workers, midwives, community health centers, and magazines. It is anticipated that high knowledge of cervical cancer among women of reproductive age will change attitudes and behaviors toward early detection of cervical cancer by undergoing VIA testing.

Statistical test results yielded a p-value of 0.001, an odds ratio (OR) of 7,6, indicating $p < \alpha = 0.05$ (H_a accepted and H_o rejected), thus concluding that there is a significant relationship between motivation and cervical cancer screening among women of reproductive age. Consistent with the findings of Harahap (2023), the research showed a significant relationship between the level of motivation and participation in VIA testing ($p = 0.01$), and the study by Dirgahayu (2021), $p < \alpha = 0.05$ (H_a accepted and H_o rejected), indicating a significant relationship between motivation and the behavior of undergoing VIA test. (Dirgahayu Ingrid, Shania Octavia Dewi, 2021; Hanriko et al, 2023)

Researchers discovered that 23 people, or 29.9%, who had high motivation did not take the VIA test. The responders were highly motivated, but their behavior was impacted by other variables that kept them from taking the VIA test. Motivation gives direction and tasks that must be completed in line with previously established goals, choosing actions that are in line with accomplishing these goals and

eliminating actions that are not. Because of the decision process, choosing certain actions to take might increase confidence (Notoatmodjo, 2014). The above discussion indicates that the motivation to undergo cervical cancer screening is expected to shape the behavior of women to engage in early detection of cervical cancer using VIA.

Statistical analysis revealed a significant relationship between the support provided by healthcare workers and the uptake of cervical cancer screening, as evidenced by a p-value of 0.007 ($p < \alpha = 0.05$, with H_a accepted and H_o rejected), with an odds ratio (OR) of 4.0, suggesting a strong association. This is corroborated by findings from Rizani (2021) and Apriyanti (2020), who recorded significant relationships between healthcare worker support and cervical cancer screening participation ($p = 0.001$ and $p = 0.011$, OR = 7.438, CI 95% 1.566-35.332 respectively). Carolin (2022) further supports these results, indicating a profound impact of healthcare worker support on screening uptake ($p = 0.000$, OR = 9.988), which highlights the critical role of healthcare professionals in enhancing VIA screening behaviors among women (Apriyanti et al., 2020; Nurjanah et al., 2022; Rizani et al., 2021). To help people maintain and improve their health, health education, and counseling are crucial in any healthcare setting (Nurfadillah, 2019). HIV-positive women are more likely to seek lifelong HIV treatment and care in health facilities, which also happen to be the places where most health education takes place. Their likelihood of learning about cervical cancer and screening may rise as a result of this approach (Khumalo, 2024).

Researchers found that although 99 respondents (79.8%) said they had support from healthcare workers, they did not take the VIA exam. To improve health status, healthcare professionals must emphasize to mothers and WRA the value of VIA testing, initiatives to make sure women have access to reliable and high-quality HPV-related information and advice, and that primary care providers (PCPs) are

well-informed. If such programs are not offered, screening rates may decrease due to the association between practitioners' knowledge and HPV-related behaviors, or they may increase due to the psychological toll that a positive screening test has on women, as many view PCPs as reliable sources of HPV information (McSherry, 2018).

Statistical test results yielded a p-value of 0.446 indicating $p > \alpha = 0.05$ (Ha rejected and H_0 accepted), thus concluding that there is no significant relationship between accessibility and cervical cancer screening among women of reproductive age. Accessibility refers to the physical resources that must be in place before a service can be offered to consumers (Notoatmodjo, 2014). The availability and continuity of healthcare within the community are a basic need for quality care. This implies that all forms of healthcare services that the community need have to be easily accessible and continuously offered. The community's ability to get quality healthcare is another crucial component. The results of Rizani's (2021) study support the idea that there is no correlation between VIA testing and distance ($p=0.119$), and Carolin's (2022) study discovered no connection between healthcare service availability and $p=0.973$ (Nurjanah et al., 2022; Rizani et al., 2021). The National Basic Health Research views accessibility from the perspectives of the types of transportation used, the amount of time (in minutes) it takes to get to the facility, and the cost of transportation (Chapola et al., 2021; Riskesdas, 2018).

Researchers have found that community access to health services, is greatly impacted by geographic variables, distance, and road infrastructure. Even when there exist VIA testing facilities with qualified staff, sufficient medication, and modern technology, these requirements do not ensure that healthcare services will be used because of the difficult access to service locations. To encourage more WRAs to participate in VIA testing, healthcare professionals can map out mothers and WRAs and expand the frequency of

integrated service post activities from once a month to two or three times a month. It is necessary to implement strategies that would expeditiously enhance residents' access and augment their involvement in cancer screening (Sano, 2017).

Statistical testing yielded a p-value of 0.001, indicating that $p < \alpha = 0.05$ (H_0 accepted and H_a rejected), conclusively demonstrating a relationship between spousal support and cervical cancer screening, with an odds ratio (OR) of 9.6. This aligns with Sondang's (2019) and Haryani's (2022) research, which found a significant relationship between spousal support and the behavior of WRAs in undergoing VIA testing ($p = 0.001$). In Jamilah's (2022) study, a relationship was identified between spousal support (p-value < 0.05) and the readiness of WRAs to undergo VIA testing. Additionally, Apriyanti's (2020) study confirmed a relationship between spousal support and VIA testing (p-value = 0.003, OR = 6.900, 95% CI 1.982-24.021). A study in Ghana provides evidence that male partners had little or no knowledge about cervical cancer. Nevertheless, some of them supported their partners financially, socially, emotionally, and materially when they contracted the disease. Men have not been adequately targeted in cervical cancer campaigns simply because it is not men's disease (Apriyanti et al., 2020; Binka et al., 2019; Haryani, 2022; Jamilah et al., 2022; Sondang & Hadi, 2019).

Family support is defined by Gottlieb as verbal information, goals, tangible help, or behaviors provided by close acquaintances within the subject's social environment, or through presence and activities that can provide emotional benefits or influence recipient behaviors. Researchers believe that respondents receiving adequate family support are more likely to undergo VIA testing due to the strong influence of close relatives or spouses, which tends to increase their motivation to improve their health status. Respondents with less supportive family backgrounds are less likely to undergo VIA testing, though this does not imply a

complete absence of testing, as 140 respondents (94.6%) who lacked spousal support still underwent VIA testing. This occurrence might be attributed to other factors such as strong knowledge and motivation from the women themselves, driven by an awareness to enhance their health. However, the study also found that 40 respondents (64.5%) with spousal support did not undergo VIA testing, potentially due to other factors such as insufficient knowledge; even if a husband supports and advises his wife to undergo VIA testing, if the wife's understanding of cervical cancer and the benefits of VIA testing is poor, she may opt not to proceed with the testing. Researchers think that husbands' knowledge about cervical cancer and the significance of VIA testing may be the cause of the strong correlation between marital support and the decision to get tested for the disease. When a husband knows how important VIA testing is, he will probably push his wife to get tested. Given that spouses have the most authority in the home, a wife's ability to make decisions is greatly influenced by their support. In this situation, a wife's conduct during the VIA test will be more consistent if her husband encourages her to do it (Chapola et al., 2021; Harmoko, 2016; Mantula & Toefy, 2023)

According to the results, 30 (14,3%) of the 210 correspondents had completed a VIA test, and 180 (85.7%) had not. This result is consistent with research by Novidasari (2018), which found that 23,4% of respondents had taken the VIA test; research by Apriyanti (2020) revealed that 66% of respondents had not taken the VIA test; research by Jamilah (2022) found that 58% of respondents had not taken the VIA test; and research by Suratmi (2023) found that 78,7% of women of reproductive age had never taken the VIA test (Apriyanti et al., 2020; Audina et al., 2023; Jamilah et al., 2022; Novidasari & Juhaeriah, 2018).

Korean studies suggest, that women may not be adequately informed or orientated with sexual health issues related to cervical cancer screening and disease. Additionally, low levels of

awareness and specific barriers to screening are greatly influenced by negative social beliefs about women's sexual activity. There were also physical and psychological side effects from the testing process that involved the exposure of the female genitalia, though it's possible that these results were overstated because of the lack of awareness regarding the screening process (Lemlem et al., 2024; Shin et al., 2021).

The merits of the VIA approach for cervical cancer screening, according to the researcher, include its ability to identify the disease directly and effectively, as well as the fact that it is free and does not negatively impact a family's finances. It is hoped that more people will be aware of the need for VIA examinations because they can lower the morbidity or death rate of cervical cancer. To expand the scope of VIA assessment, health personnel are expected to be able to actively extend their duties.

CONCLUSIONS

All variables affect the propensity of women of reproductive age to undertake cervical cancer screening using the Visual Inspection with Acetic Acid (VIA) method, except for access accessibility, which did not indicate a significant association. The most important aspect is the influence of spouse support ($p\text{-value} = 0.001$).

The study suggests that husbands should be included in counseling meetings with medical specialists and that women of reproductive age should be educated about cervical cancer early detection. It is expected to increase cross-sectoral cooperation in the context of promoting cervical cancer screening using the VIA method, in addition to increasing access and arranging more health services for acetic acid visual inspection (VIA) in the Puskesmas work region, Puskesmas Karang Anyar, South Lampung. Other factors, such the influence of local community culture on cervical cancer screening, can be added to the study's findings or used as a reference for future research.

REFERENCESS

- Abera, G. B., Yebyo, H. G., Hailekiros, H., Niguse, S., Berhe, Y., Gigar, G., ... Goba, G. (2023). Epidemiology of pre-cancerous cervical lesion and risk factors among adult women in Tigray, Ethiopia. *PLoS ONE*, 18(1 January), 1-12. <https://doi.org/10.1371/journal.pone.0280191>
- Almonte, M., Ferreccio, C., Luciani, S., Gonzales, M., Delgado, J. M., Santos, C., ... Sasieni, P. (2015). Visual Inspection after Acetic Acid (VIA) is highly heterogeneous in primary cervical screening in Amazonian Peru. *PLoS ONE*, 10(1), 1-12. <https://doi.org/10.1371/journal.pone.0115355>
- American Cancer. (2022). Cancer Facts & Figur. <https://www.cancer.org/research/cancer-facts-statistics/all-cancer-facts-figures/cancer-facts-figures-2022.html>.
- Apriyanti, N., Utami, V. W., Yantina, Y., & Hermawan, D. (2020). Faktor-Faktor Yang Berhubungan Dengan Pemeriksaan Ca Servik Menggunakan Metode Visual Asam Asetat (Iva). *Jurnal Kebidanan Malahayati*, 6(1), 37-47. 6(1), 37-47.
- Arum, Sheria P. (2021). Stop Kanker Serviks. Notebook.
- Binka, C., Doku, D. T., Nyarko, S. H., & Awusabo-Asare, K. (2019). Male support for cervical cancer screening and treatment in rural Ghana. *PLoS ONE*, 14(11), 1-10. <https://doi.org/10.1371/journal.pone.0224692>
- Bouvard, V., Wentzensen, N., Mackie, A., Berkhof, J., Brotherton, J., Giorgi-Rossi, P., ... & Lauby-Secretan, B. (2021). The IARC perspective on cervical cancer screening. *New England Journal of Medicine*, 385(20), 1908-1918.
- Carolyn, B. T., Nurjanah, S., & Lail, N. H. (2022). Factors Related to Women of Childbearing Age (WUS) Participation in Performing a Visual Inspection of Acetic Acid (IVA) Pamulang Health Center in 2022. *Nursing and Health Sciences Journal (NHSJ)*, 2(2), 143-153. <https://doi.org/10.53713/nhs.v2i2.102>.
- Castillo, M., Astudillo, A., Clavero, O., Velasco, J., Ibáñez, R., & Desanjosé, S. (2016). Poor cervical cancer screening attendance and false negatives. A call for organized screening. *PLoS ONE*, 11(8), 1-9. <https://doi.org/10.1371/journal.pone.0161403>
- Chapola, J., Lee, F., Bula, A., Mapanje, C., Phiri, B. R., Kamtuwange, N., Tsidya, M., Tang, J. H., & Chinula, L. (2021). Barriers to follow-up after an abnormal cervical cancer screening result and the role of male partners: A qualitative study. *BMJ Open*, 11(9). <https://doi.org/10.1136/bmjopen-2021-049901>
- Di, J., Rutherford, S., Wu, J., Song, B., Ma, L., Chen, J., & Chu, C. (2015). Knowledge of cervical cancer screening among women across different socio-economic regions of China. *PLoS ONE*, 10(12), 1-16. <https://doi.org/10.1371/journal.pone.0144819>
- Dinkes Lampung. (2023). Profil Kesehatan Provinsi Lampung. 44. <https://dinkes.lampungprov.go.id/download/profil-kesehatan-provinsi-lampung-tahun-2023/>.
- Green, L. W. (2022). A Framework for Planning and Evaluation: PRECEDE-PROCEED Evolution and Application of the Model. *Poltekkes Jogja, Hal.* 1-25.
- Harahap, N. (2023). Hubungan Motivasi Dan Sikap Dengan Deteksi Dini Kanker Serviks Menggunakan Iva Test Pada Wanita Usia Subur Di TpmB Bidan Herni Pamulang Tangerang Selatan. *Indonesian Journal of Midwifery Scientific*, 2(1), 28-33.
- Harmoko. (2016). Asuhan Keperawatan

- Keluarga . Yogyakarta: Pustaka Pelajar.
- Haryani, H. (2022). The Effects of Husband Support, Motivation, and Self-Efficacy on the Examination of Visual Inspection of Acetic Acid (IVA) in Karawang Village, Karawang Health Center, and Sukabumi Regency in Women of Childbearing Age (PUS). *Jurnal Keperawatan Komprehensif*, 8(Special Issue), 10-19.
- Jamilah, J., Rahmayani, D., & Palimbo, A. (2022). Faktor-Faktor Yang Mempengaruhi Kesiapan Wanita Usia Subur Dalam Pemeriksaan Iva Di Upt Puskesmas Pasar Sabtu. *Khatulistiwa Nursing Journal*, 4(2), 64-72. <https://doi.org/10.53399/knj.v4i0.184>.
- Kemenkes, R. (2021). Profil kesehatan indonesia.
- Khomphaiboontij, U., Sreamsukcharoenchai, N., Pitakkarnkul, S., Rittiluechai, K., & Tangjitgamol, S. (2023). Knowledge of Thai women in cervical cancer etiology and screening. *PLoS ONE*, 18(5 May), 1-12. <https://doi.org/10.1371/journal.pone.0286011>
- Khumalo, P. G., Carey, M., Mackenzie, L., & Sanson-Fisher, R. (2024). Cervical cancer screening knowledge and associated factors among Eswatini women: A cross-sectional study. *PLoS ONE*, 19(4 April), 1-15. <https://doi.org/10.1371/journal.pone.0300763>
- Kurniawati, I. (2021). pengaruh pengetahuan, motivasi dan dukungan suami terhadap perilaku pemeriksaan IVA pada Kelompok Wanita Usia Subur di Puskesmas Kedungrej. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 53(9), 1689-1699. <http://publications.lib.chalmers.se/records/fulltext/245180/245180.pdf><https://hdl.handle.net/20.500.12380/245180><https://doi.org/10.1016/j.jsames.2011.03.003><https://doi.org/10.1016/j.gr.2017.08.001><https://dx.doi.org/10.1016/j.precamres.2014.12>.
- Lemlem, S. B., Gary, R. A., Yeager, K. A., Sisay, M. M., & Higgins, M. K. (2024). Psychometric properties of a modified health belief model for cervical cancer and visual inspection with acetic acid among healthcare professionals in Ethiopia. *PLoS ONE*, 19(4 April), 1-14. <https://doi.org/10.1371/journal.pone.0295905>
- Løkke, K. F., Rasch, V., Mwaiselage, J., Gammeltoft, T., & Linde, D. S. (2022). Acceptability of text messages and knowledge change for cervical cancer screening: a Tanzanian mixed methods study. *BMJ Open*, 12(9), 9-14. <https://doi.org/10.1136/bmjopen-2021-058450>
- Mantula, F., & Toefy, Y. (2023). Women and health providers' perspectives on male support for cervical cancer screening in Gwanda district, Zimbabwe. *PLoS ONE*, 18(10 October), 1-18. <https://doi.org/10.1371/journal.pone.0282931>
- McSherry, L. A., O'Leary, E., Dombrowski, S. U., Francis, J. J., Martin, C. M., O'Leary, J. J., & Sharp, L. (2018). Which primary care practitioners have poor human papillomavirus (HPV) knowledge? A step towards informing the development of professional education initiatives. *PLoS ONE*, 13(12), 1-15. <https://doi.org/10.1371/journal.pone.0208482>
- Mittal, A., Neibart, S. S., Kulkarni, A., Anderson, T., Hudson, S. V., Beer, N. L., ... Kohler, R. E. (2023). Barriers and facilitators to effective cervical cancer screening in Belize: a qualitative analysis. *Cancer Causes and Control*, 34(8), 647-656. <https://doi.org/10.1007/s10552-023-01703-0>
- Ndejjo, R., Mukama, T., Kiguli, J., &

- Musoke, D. (2017). Knowledge, facilitators and barriers to cervical cancer screening among women in Uganda: A qualitative study. *BMJ Open*, 7(6), 1-8. <https://doi.org/10.1136/bmjopen-2017-016282>
- Peraturan Menteri Kesehatan Republik Indonesia Nomor 29/Permenkes/No.1001/5/2017 tentang Penanggulangan Kanker Payudara dan Kanker Leher Rahim. Perubahan.
- Poli, U. R., Bidinger, P. D., & Gowrishankar, S. (2015). Visual inspection with acetic acid (via) screening program: 7 years experience in early detection of cervical cancer and pre-cancers in rural South India. *Indian Journal of Community Medicine*, 40(3), 203-207. <https://doi.org/10.4103/0970-0218.158873>
- Riskesdas. (2018). Riset Kesehatan Dasar Nasional. Riskesdas, 76. <https://www.litbang.kemkes.go.id/hasil-utama-riskesdas-2018/>.
- Rizani, A., Kementerian, P., & Banjarmasin, K. (2021). Faktor-Faktor Yang Berhubungan Dengan Pemeriksaan Iva (Inspeksi Visual Asam Asetat) Pada Pus (Pasangan Usia Subur) Di Wilayah Kerja Puskesmas Mataraman Tahun 2020. *Jurnal Skala Kesehatan*, 12(2), 115-125.
- Rodiani, Fathurrohman, M. R., Oktarlina, R. Z., & Islami, N. (2019). Hubungan Tingkat Pengetahuan Wanita Usia Subur (WUS) dan Dukungan Suami dengan Pemeriksaan Inspeksi Visual Asam Asetat (IVA) sebagai Metode Deteksi Lesi Prakanker Serviks di Puskesmas Kalibangan Kabupaten Lampung Utara Tahun 2019. *Correlation of Know*. 9(1), 212-217.
- Sano, H., Goto, R., & Hamashima, C. (2017). Does lack of resources impair access to breast and cervical cancer screening in Japan? *PLoS ONE*, 12(7), 1-16. <https://doi.org/10.1371/journal.pone.0180819>
- Shin, H. Y., Song, S. Y., Jun, J. K., Kim, K. Y., & Kang, P. (2021). Barriers and strategies for cervical cancer screening: What do female university students know and want? *PLoS ONE*, 16(10 October), 1-12. <https://doi.org/10.1371/journal.pone.0257529>
- Sondang, M., & Hadi, E. N. (2019). Dukungan Suami Terhadap Perilaku WUS (30-50 Tahun) dalam Melakukan Pemeriksaan IVA di Wilayah Kerja Puskesmas Bondongan Tahun 2018. *Gaster*, 17(2), 200. <https://doi.org/10.30787/gaster.v17i2.368>.
- Suratmi, M., Audina, Samangan, Tri. (2023). Pemeriksaan IVA (Inspeksi Visual Asam Asetat) Pada Wanita Usia Subur di Wilayah Kerja Puskesmas Simpang Katis Kabupaten Bangka Tengah Tahun 2021. *Jurnal Untuk Masyarakat Sehat (JUKMAS)*, 7(1), 27-44.
- Teame, H., Addissie, A., Ayele, W., Hirpa, S., Gebremariam, A., Gebreheat, G., & Jemal, A. (2018). Factors associated with cervical precancerous lesions among women screened for cervical cancer in Addis Ababa, Ethiopia: A case control study. *PLoS ONE*, 13(1), 1-13. <https://doi.org/10.1371/journal.pone.0191506>
- WHO. (2021). Monitoring Health For The SDGs. <https://creativecommons.org/licenses/by-nc-sa/3.0/igo>.