Research Article

CORRELATION BETWEEN KNOWLEDGE, ATTITUDE, AND PARTNER SUPPORT TOWARDS THE PRACTICE OF VISUAL INSPECTION WITH ACETIC ACID TEST AMONG DENPASAR CITY WOMEN

[1], * I Gde Sastra Winata, [1]William Alexander Setiawan, [2]PriankaPradnya Paramitha, [2]Mirani Ulfa Yusrika

[1]Obstetrics and Gynecology Department, Prof. Dr. I.G.N.G. Ngoerah Hospital/Medical Faculty of Udayana University, Bali, Indonesia.
[2]Medical Faculty of Udayana University, Bali, Indonesia.

ABSTRACT

Background: Cervical cancer is the fourth most common cancer that happens to women worldwide. Thus the high mortality rate is unavoidable. Visual Inspection with Acetic Acid (VIA) is a practical and inexpensive screening test for detecting cervical cancer. We aim to show the association between knowledge, attitude, and partner support towards VIA practice in women in Denpasar, Bali. **Methods:** This study is cross-sectional with an analytic observational design conducted at the Public Health Centers Denpasar from July-August 2022. The respondents consisted of 90 child-bearing-age women who met the inclusion criteria. The questionnaire consisted of informed consent, demographic characteristics (26 questions), knowledge (20 questions), attitude (22 questions), partner support (11 questions), and practice of VIA (2 questions). The data analysis used the Chi-square test using SPSS ver26. **Results:** The median age of all respondents was 33+10 years. The majority of respondents were monogamous (93.03%), had no history of miscarriage (80%), used contraception (56.07%), and the mean age of first sexual intercourse was 20.6 years. Up to 69 women (76.7%) had the VIA Test in the past five years, and 42 women (46.7%) took the test regularly every three years. There is a correlation between knowledge (p=0.001, r =0.334), attitude (p<0.001, r=0.367), and partner supports (p=0.03, r=0.197) toward practicing VIA. **Conclusion:** The practice of VIA is influenced by the level of knowledge, attitudes, and partner support of the child-bearing-age women in Denpasar. All healthcare professionals and the environment should support and encourage women to perform VIA regularly.

Keywords: Cervical Cancer, Knowledge, Attitude. Practice, Visual Inspection with Acetic Acid.

INTRODUCTION

Cervical cancer is among the most preventable cancers and can be detected easily. However, it still occupies the 4th most common cancer among women worldwide. In 2022, 90% of new cases and deaths of cervical cancer came from low to middle-income countries.[1] In Indonesia, cervical cancer ranks second in most cancer cases, with the number reaching 36,633, or equivalent to 9.2% of the total cancer cases in 2020. The incidence of cervical cancer in Indonesia peaks in the age group 45-54 years (32.40%) and the age group 35-45 years (31.40%).[2] Early detection is a compelling way to decrease cervical cancer's burden and mortality. The easiest, fastest, and cheapest screening test available at primary care is the Visual Inspection with Acetic Acid (VIA). The VIA test is carried out by observing the color change on the cervix after rubbing the acetic acid solution and Lugol's solution with a cotton swab. The findings from VIA are positive precancerous lesions if the cervix has a white area raised surface and clear boundaries around the transformation zone or squamocolumnar edge.[3] Currently, in Indonesia, the VIA method has been proclaimed free of charge for Women of Reproductive Age (WRA), namely women aged 15-49 years or women who have had sexual intercourse, yet from the study, early detection for cervical cancer in Indonesia since 2008 -2016 is still shallow, around 4.34% or 1,623,913 people using the VIA method from a total target of 37.5 million women.[4] In 2020, in Bali, the coverage of WRA conducting VIA tests was 4.1%. This low coverage needs to be evaluated to increase awareness of early detection.[5]

Low public awareness of cancer leads to low early detection rates, especially among women.[6] Many factors influence a person's

behavior for early detection of cervical cancer. Predisposing factors, such as knowledge, attitudes, beliefs, and values, form behavioral factors. Other factors are supporting factors such as the availability of health facilities. Other driving factors are attitudes and behavior of health workers or other officers, family support, and the patient surrounding environment.[7] The main objective of this study was to determine the relationship between knowledge, attitudes, and partner support towards the behavior of early detection of cervical cancer with VIA among visitors at public health centers in Denpasar City.

METHOD

This study was a cross-sectional study with an analytical observational study design. We used a questionnaire for the research instrument. This study was conducted at Public Health Center in Denpasar from July to August 2022. The questionnaire used in this study is a questionnaire from previous research that has been tested for its validity. The respondents consisted of 90 people. The research instrument used a questionnaire containing informed consent, demographic data, 20 knowledge questions, 22 attitude questions, 11 about husband support, and two about VIA behavior. We accumulated the scores for each section.

Data analysis uses the IBM SPSS Statistics 26 application and the Chi-square test for univariate and bivariate tests. We divided the level of knowledge into two categories: Good (>80%) and Poor (<80). Attitudes are grouped into two categories, good (>71) and bad (<71), based on the median score. Husband's support is grouped into two categories; support (7-11) and not support (<7). The last five years of detection behavior included two types: yes and no. This study has been approved by the Faculty of Medicine Ethics Committee, Udayana University/Sanglah General Hospital in Denpasar.

*Corresponding Author: I Gde Sastra Winata,
1Obstetrics and Gynecology Department, Prof. Dr. I.G.N.G. Ngoerah Hospital/ Medical Faculty of Udayana University, Bali, Indonesia.

RESULTS

Table 1 shows the essential characteristics of the study population for 90 respondents. From this distribution, it was found that most of the respondents were 33 years old, had a high school education (46.7%), worked (63.3%) with an income of IDR 1,500,000 – 3,000,000 (43.3%), had a marital history one time (93.3%), age of first sexual intercourse are over 20 years old (56.4%) with two children (53.3%), no history of miscarriage (80.0%), using birth control (56.7%) and not smoking (90%).

Table 1. Basic characteristics of research subjects

Characteristics	Health center visitors n (%) (n=90)
Age	
Median $\pm$ IQR	33 $\pm$ 10
Education	
Junior High School	15 (16.7)
Senior High School	42 (46.7)
College	33 (36.7)
occupation	
Working	57 (63.3)
Housewife	33 (36.7)
Income	
<1,500,000	33 (36.7)
1,500,000 – 3,000,000	39 (43.3)
>3,000,000	18 (20.0)
Marital History	
One time	84 (93.3)
$\geq$2 times	6 (6.70)
Age of First-Time Sex	
<20 years	32 (35.6)
$\geq$20 years	58 (54.4)
Number of children	
No children	3 (3.3)
One child	6 (6.7)
Two children	48 (53.3)
Three children	33 (36.7)
Miscarriage	
Never	72 (80.0)
One time	15 (16.7)
$\geq$2 times	3 (3.3)
Smoke	
Yes	9 (10)
Not	81 (90)
Use of birth control	
Yes	51 (56.7)
Not	39 (43.3)

Thus, from the table, it can be concluded that there is a statistically significant relationship between the level of knowledge on VIA detection behavior over the last five years with a p=0.001 and a correlation value of 0.334 which indicates a positive correlation with moderate correlation strength and clinically significant. The relationship between a good attitude towards VIA detection behavior in the last five years obtained a p-value <0.001 and a correlation value of 0.367 which indicates that the correlation between good attitude and VIA detection behavior over the previous five years is statistically significant and shows a positive correlation with moderate correlation strength and clinically meaningful. Meanwhile, the husband's support for VIA detection behavior in the last five years has a p-value = 0.01 and a correlation value of 0.266, which illustrates a statistically significant correlation and a positive correlation with a low correlation and not clinically significant.

Table 2. The relationship between knowledge, attitude, and husband's support toward the behaviour of early detection of cervical cancer in the last five years.

Variables	Behavior Detection in the Last 5 Years				
	Yes	Not	Total	P	r
Knowledge level				0.001	0.334
High (85-100)	48 (88.9%)	6 (11.1%)	54 (100%)		
Low (<85)	21 (41.7%)	15 (34.6%)	36 (100%)		
Attitude				<0.001	0.367
Well	42 (93.3%)	3 (6.7%)	45 (100%)		
Bad	27 (60.0%)	18 (40.0%)	45 (100%)		
Husband Support				0.01	0.266
Support	51 (70.8%)	21 (29.2%)	72 (100%)		
Does not support	18 (100%)	0	18 (100%)		
TOTAL	69 (76.7%)	21 (23.3.6%)	90 (100%)		

 * P = significant value; r = correlation value

There are relations between the level of knowledge of VIA detection behavior every three years with a p = 0.001 and a correlation value of 0.334 that there is a statistically significant correlation and a positive correlation with moderate correlation strength and clinically effective. The relations between attitude and routine detection behavior obtained a value of p=0.011 and a correlation value of 0.258, with the interpretation of a statistically significant correlation but not clinically with a low correlation strength. Meanwhile, the relationship between the husband's support and normal VIA detection behavior shows a p-value = 0.057 and a correlation value of 0.197, which means a statistical correlation. The strength of the correlation is low and not clinically significant.

Table 3. The results of the partner's knowledge, attitudes, and support level for VIA detection behavior every three years.

Variables	Routine Detection Behavior Every 3 Years				
	Yes	Not	Total	P	R
Knowledge level				0.001	0.334
High (85-100)	48 (88.9%)	6 (11.1%)	54 (100%)		
Low (<85)	21 (41.7%)	15 (34.6%)	36 (100%)		
Attitude				0.011	0.258
Well	42 (93.3%)	3 (6.7%)	45 (100%)		
Bad	27 (60.0%)	18 (40.0%)	45 (100%)		
Husband Support				0.057	0.197
Support	51 (70.8%)	21 (29.2%)	72 (100%)		
Does not support	18 (100%)	0	18 (100%)		
TOTAL	69 (76.7%)	21 (23.3.6%)	90 (100%)		

* P = significant value; r = correlation value

Table 4. Multivariate analysis of the level of knowledge, attitude, husband support, and routine early detection behavior three years

Variable	Coefficient	aOR	95% CI		P
			Lower	Upper	
Husband Support	19,338	-	-		-
Attitude	-1,776	0.169	0.042	0.688	0.013
Behavior	-1,669	0.188	0.058	0.615	0.006

DISCUSSION

Relations between knowledge and VIA detection behavior

Based on the analysis results, there is a relationship between knowledge and early detection with the VIA method in WRA in the Denpasar Health Center. The results of this study are similar to Dewi's research, which found a significant relationship between knowledge and the behavior of WRA in checking VIA.8 The proportion of WRA who did VIA examinations in the last five years was found to be more in WRA with good knowledge of 48 (88.9%), while the proportion of WRA who did not have VIA examination was more in WRA who had less knowledge, at 15 (34.6%). The results of this study are in line with Wulandari's research (2017), namely that there is a significant relationship between the level of knowledge of cervical cancer and VIA examination behavior with p-value = 0.027 <0.05.9

Correlation between Attitude and VIA Detection Behavior

Based on the analysis result, there is a relationship between attitude and early detection by the VIA method for WRA in the Denpasar Health Center. In line with a study conducted by Handayani (2018) in 2017, there was a significant relationship between attitudes and early detection behavior with the VIA method for WRA in the village of Menyak, Koba sub-district, Central Bangka district with a value of ρ = 0.000. This study found that a mother who had not to support attitude had a 7.367 times greater risk of not having a VIA examination than those with a supportive attitude.10

Relations between Husband's Support and VIA Detection Behaviour

Based on the results of the analysis, that a relation between the husband's support and early detection by the VIA method for WRA in the Denpasar Health Center. The results of this study based on Yuliwati's research (2012) show there is a significant relation between husband or family support and VIA examination behavior with a value of p=0.000, which shows that it greatly influences their health status.11

CONCLUSION

Based on the results of the analysis are:

1. Most respondents had taken a VIA test but had not done it regularly. Most respondents have secondary education, good knowledge, and easy access to Primary Health Centres to get support from their husbands.
2. There is a significant relationship between age, knowledge, attitude, and VIA test examination. A significant relation had been found between the husband's support and the VIA test, but not clinically significant.
3. The factor that has the most influence on the examination of the VIA test is the level of knowledge.

ETHICAL CLEARANCE

This study has obtained ethics approval from The Ethics Committee, Faculty of Medicine, Udayana University, Denpasar, Bali, Indonesia, with the references number 2223/UN14.2.2.VII.14/LT/2022.

CONFLICT OF INTEREST

The authors declare that there is no competing interest regarding the publication of this article.

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AUTHOR CONTRIBUTIONS

All authors contributed equally to this research from the conceptual framework, data gathering, and analysis until the final report's interpretation of the results.

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