ORIGINAL ARTICLE

ANALYSIS OF THE FACTORS AFFECTING MOTIVATION WOMEN OF CHILDBEARING AGE FOR VISUAL INSPECTION (VIA) TEST

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Indonesian Nursing Journal of Education and Clinic (INJEC)

Volume 11 Issue 2, August 2026
DOI: 10.24990/injec.v11i2.592
injec.aipni-ainec.org/index.php/INJEC/index
Received : 2023-01-07
Accepted : 2026-08-31

ABSTRACT

Introduction: Cervical cancer remains a major public health problem among women, particularly in developing countries, including Indonesia. Early detection plays an important role in preventing disease progression and reducing cervical cancer mortality. Visual Inspection with Acetic Acid (VIA) is a simple, affordable, and accessible screening method that can be implemented in primary healthcare settings. However, women's participation in VIA screening remains suboptimal and may be influenced by sociodemographic, reproductive, cognitive, and psychosocial factors. This study aimed to analyze factors associated with the motivation of women of childbearing age to undergo VIA testing.

Methods: This cross-sectional study involved 116 women of childbearing age selected using purposive sampling according to predefined inclusion and exclusion criteria. Data were collected using a structured questionnaire. Associations between variables were analyzed using the chi-square test, followed by multiple logistic regression to identify factors independently associated with motivation for VIA testing.

Results: Parity, education, and knowledge were significantly associated with women's motivation to undergo VIA testing ($p < 0.05$), whereas age, economic status, husband's support, and attitude showed no significant associations. Multiple logistic regression analysis identified parity as a significant factor associated with motivation ($p = 0.047$; OR = 0.253), while age, economic status, and education were identified as confounding variables. Parity emerged as the dominant factor associated with motivation for VIA testing.

Conclusion: Parity was significantly associated with women's motivation to undergo VIA testing. Targeted health education, counseling, and communication strategies are needed to strengthen motivation and increase participation in cervical cancer screening, particularly among women with reproductive risk factors.

Keywords: Cervical Cancer, Motivation, Predisposing Factor, VIA Test.

INTRODUCTION

The world is currently facing public health problems with the epidemiological transition, namely the shifting of health problems from communicable diseases to non-communicable diseases. Cancer is one of the non-communicable diseases which is a health burden throughout the world. Cervical cancer is the second most common cancer in women worldwide and the seventh most common cause of death from cancer in women. Breast cancer and cervical cancer are one of the most common cancers that occur in Indonesia (Vaccination, 2005). The main reason for the increase in cervical cancer in developing countries including Indonesia is due to the lack of an effective screening program with the aim of detecting conditions before cancer and cancer at an early stage including treatment before further invasive process(Kementrian Kesehatan, 2019a) Data from the Global Burden of Cancer (GLOBOCAN) released by the World Health Organization (WHO/Word Health Organization) states that the number of cases and deaths from cancer up to 2018 was 18.1 million cases and 9.6 million deaths in 2018. Deaths from cancer are expected to continue to increase to more than 13.1 million in 2030. The International Agency for Research on Cancer (IARC) estimates that one in five male population and one in five female population worldwide will suffer from cancer. throughout life. One in eight and one in eleven women will die from cancer (Kementrian Kesehatan, 2019b). GLOBACON states that countries in Asia have the largest contribution to cancer cases worldwide, this could be due to some countries with large populations such as China, India and Indoneisa (Kementrian Kesehatan, 2019b). The behaviour of Fertile Age Women in cervical cancer prevention supported by personal factors (age, occupation, education, income, knowledge of cervical cancer (Armini et al., 2016). The purpose of this study was to determine the factors that influence the motivation of women of childbearing age in the IVA test motivasi (Chigbu et al., 2013).

METHODS

Study Design

This research is an observational analytic study with a cross-sectional approach, conducted in Sumbersari Jember District to analyze the factors that influence the motivation of women of childbearing age in the IVA Test. That is factors of age, parity, education, knowledge, husband's. support, economic status and attitudes.

Population, Samples, and Sampling

The population in this study were 157 women of childbearing age. The sampling technique used purposive sampling with 116 women of childbearing age. who met the inclusion and exclusion criteria. The inclusion criteria in this study were women of childbearing age (20-45 years), healthy condition (not diagnosed with malignancy (cancer) and willing to be respondents).

Instruments

The research instrument was a questionnaire developed from the concept of the scope of reproductive health and guidelines for the prevention of malignancies in women. The questionnaire open-ended questions with includes the independent variables age, parity, socio-economic, education, husband's support, attitude, knowledge of the IVA Test. And the questionnaire on the dependent variable about the motivation of women of childbearing age in the VIA Test examination.

Procedure

The researcher conducts a literature review and prepares a research proposal, so the researcher takes care of permission from the ethics commission. Research will begin if the researcher has obtained approval from the Ethics Commission. The research starts with compiling a research proposal, then applying for permission to Bakesbangpol for research location permits, continuing preliminary studies, submitting assignment orders to conduct research, submitting research permits to research sites, conducting research with a team, processing data and compiling research reports.

Data Analysis

Data analysis was done with SPSS version 12.0. The analysis of data in this study, included univariate,bivariate,and multivariate analysis. Univariate analysis was done to describe each independent variables and dependent variable. Bivariate Analysis used Chi-Square test with a confidence level of 95% ($\alpha = 0,05$). If p-value $\leq \alpha$, then there was a significant relationship between independent and dependent variables. Multivariate Analysis used in this study was the multiple logistic regression analysis.

Ethical Clearance

Ethical review was carried out in this study with numbers No.1715/UN25.8/KEPK/DL/2022.

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RESULTS

Univariate Analysis

The result of the distribution of independent and dependent show in Table 1:

Table 1 Frequency Distribution of Independent Variables and Dependen variable

Variables	n	%
Indepenent		
Age		
>20 and >35 Years	64	55,2
20 -35 Years	52	44,8
Parity		
Low Risk (> 2 Children)	69	59,5
High Risk (≥ 2 children)	47	40,5
Economic Status		
Lower (≤Rp.2.500.000)	62	53,4
High (>Rp.2.500.000)	54	46,6
Education		
Low (Elementary School, Junior High School	60	51,7
High(Senior High School, Higher Education	56	48,3
Knowledge		
Good	61	52,6
Poor	55	47,4
Husbond Support		
Support	86	74,1
Not Support	30	25,9
Atitude		
Positive	61	52,6
Negative	55	47,4
Motivation for VIA Test		
Good	97	83,6
Poor	19	16,4

Table 1 shows that most of the respondents had a positive attitude of 61%, good knowledge of 61%, received husband's support of 86%, and most of the respondents were aged <20 and >35 years, namely 64% and high risk parity (> 2 children) 69%.

Bivariate Analysis

Tabel 2 Bivariate Analysis

Variables	Motivation IVA Test Examination		P Value	OR CI (95%)
	Poor n (%)	Good n (%)		
Age				
>20 and >35 Years (Risk)	11 (17,2)	53 (82,8)	0,210	1,878
20 -35 Years (Not Risk)	8(15,4)	44(84,6)		(0,694-5,084)
Parity				
> 2 Children (High Risk)	16 (23,2)	53(76,8)	0,016	4,428
≥ 2 children (Low Risk)	3 (6,4)	44(93,6)		(1,211-16,186)
Economic Status				

Lower (≤Rp.2.500.000)	14(22,6)	48 (77,4)	0,094	2,402
High (>Rp.2.500.000)	5 (9,3)	49 (90,7)		(0,844-6,839)
Education				
Low (Elementary School, Junior High School	14 (23,3)	46 (76,7)		3,104
High(Senior High School, Higher Education	5 (9,0)	51 (91,0)	0,036	(1,037-9,290)
Knowledge				
Poor	13 (23,2)	43 (76,7)	0,055	2,721
Good	6 (10,0)	54(90,0)		(0,955-7,752)
Husbond Support				
Not Support	4(13,3)	26 (86,7)		0,728
Support	15(17,4)	71(82,6)	0,601	(0,221-2,396)
Atitude				
Negative	11(20)	50 (90)		0,774
Positive	8(13)	47 (77)	0,612	(0,286-2,090)

According to the table 2, bivariate analysis using the chi square statistical test (p value <0.05) show that parity, education, knowledge have a significant relationship to motivation in the IVA test, while age, economic status, husband's support and attitude has no significant relationship

Multivariat Analysis

Tabel 3 Multivariat Analysis

Variables	B	Wald	Sig	OR	95% CI Exp (B)	
					Lower	Upper
Parity	-0,375	3,932	0,047	0,253	0,065	0,984
Age	-0,348	0,400	0,527	0,706	0,240	2,076
Economic Status	-0,492	0,661	0,416	0,611	0,187	2,002
Education	-0,909	2,104	0,147	0,403	0,118	1,376

According to the table, show that there is a significant relationship between parity and motivation in the IVA test. The high risk parity factor has a greater relationship with the OR (0.253) than the low risk parity, thus the high risk parity approximately 0.253 times has good motivation in the IVA Test compared to the low risk parity, while age, economic status and education are confounding variables or confounding

DISCUSSION

This research has provided important insights into the factors motivating women to participate in cervical cancer prevention programs. Visual inspection with acetic acid (VIA) has been established as an effective screening method for cervical cancer. The results of the study in table 1 show that most women have good motivation 83% to do an IVA Test. This is in line with the research there was a significant relationship between the level of motivation and participation in IVA examinations (p = 0.01) (Suartini et al., 2021a). Most women of childbearing age who took part in the IVA examination had a strong level of motivation (Suartini et al., 2021b)

Factors including the majority of respondents having a positive attitude of 61%, good knowledge of 61%, getting husband's support 86%, and most of the respondents aged <20 and >35 years namely 64% and high risk parity (> 2 children) 69%. This is in line with what was stated by Selvi Fitriah (2019) that there are four factors that influence healthy living behavior, namely motivation, ability, perception and personality. Ability, which shows a person's capacity, perception, namely how a person interprets information in depth so that his behavior is in accordance with what is desired, while personality is a person's characteristics which include knowledge, attitudes, skills and abilities maka(Fitriah et al., 2019) Personality plays an important role where the fear of carrying out an IVA examination will influence women of childbearing age decision to participate in IVA Test examination.

High risk parity factors have a greater relationship with OR (0.253) than low risk parity, thus high risk parity approximately 0.253 times have good motivation in the IVA Test compared to low risk parity. Women who have had 3 or more full-term pregnancies have an increased risk of developing cervical cancer. It is thought this may be due to increased exposure to HPV infection with sexual activity. Also, studies have pointed to hormonal changes during pregnancy as possibly making women more susceptible to HPV infection or cancer growth. Another thought is that pregnant women may have weaker immune systems, allowing HPV infection and cancer growth (Widayanti et al., 2020). Researchers assume that women of childbearing age who find themselves at high risk will tend to have fear or urge to do IVA test examination the grounds that they are afraid of experiencing chronic pain without early detection MAKA

This is in line with the theory of Reasoned Action (TRA) asserting that the most important determinant of behavior is behavioral intention. This theory shows that a person's desire and encouragement to behave or not in an action is based on belief (Motivation to comply) from the person and the evaluation of the results resulting from his behavior. So, someone who has confidence that the results obtained are positive, will appear positive towards that behavior, and otherwise (Glanz et al., 2002)

CONCLUSION

The research results show that the proportion women of childbearing age who are motivated to carry out an IVA Test, a significant factor correlation of parity, education, and knowledge. Multivariate analysis shows that parity is the dominant factor influencing motivation in examining the IVA test. Therefore, women of childbearing age must actively seeking information related to the cervix cancer and IVA tests to minimize problems with reproductive health. Besides, it is necessary improve health promotion such as counseling and socialization of IVA test as early as possible cervical cancer detection.

CONFLICT OF INTEREST

The Author(s) declare(s) that there is no conflict of interest'

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