



The Influence of Occupation, Socio-Economics, History of Sexually Transmitted Diseases and Health Insurance Participation on Visual Inspection with Acetic Acid Visits in Ponorogo Regency

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Abstract

Cervical cancer is a type of cancer that affects women of reproductive age. The incidence of cervical cancer in the world is in the second position which is a major problem of women's health, in developing countries especially in Indonesia. Health workers have been intensively taking preventive measures to reduce the high prevalence of cervical cancer in Indonesia. Precautions can be taken by action the early detection method is simple, namely visual inspection with acetic acid (VIA). This study aims to analyze the factors that influence the efforts of women of childbearing age to carry out early detection of cervical cancer using the visual inspection with acetic acid method. This research is a quantitative study with a case control study approach. A sample of 150 respondents consisting of 50 case samples and 100 control samples were obtained by using a 2-stage sampling technique, namely cluster random sampling and proportionated random sampling. Data analysis used chi square test and logistic regression. The results showed that the p value of occupation ($p = 0.047$), socio-economics ($p = 0.138$), history of sexually transmitted diseases ($p = 0.318$), health insurance participation ($p = 0.007$). The conclusion of this study is that there is an influence between occupation and health insurance participation against visual inspection with acetic acid visits.

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INTRODUCTION

Cervical cancer is a type of cancer that affects women of reproductive age. The incidence of cervical cancer in the world occupies the second position which is the main problem of women's health, especially in developing countries, especially in Indonesia (WHO, 2016).

In 2012, 266,000 women worldwide died of cervical cancer. There were 348,809 cases of cervical cancer in Indonesia in 2016, while in 2018, according to the Global Cancer Observatory, there were 32,469 cases of cervical cancer per year in Indonesia, with a mortality rate of 18,279 people. The prevalence of cervical cancer incidence in Indonesia in 2019 reached 23.4 per 100,000 population with an average mortality of 13.9 per 100,000 population. (Indonesian Ministry of Health, 2019).

Based on a preliminary study at the Ponorogo District Health Office, in 2017 there were 30 women of childbearing age who were positive for cervical cancer. In 2018, there were 41 women of childbearing age who were positive for cervical cancer. The data above shows that there is an increase in the number of cervical cancer cases in Ponorogo Regency.

Preventive measures have been intensively carried out by health workers to reduce the high prevalence of cervical cancer in Indonesia. Preventive action can be done with early detection measures, this needs to be done because the symptoms of cervical cancer are not visible to a severe stage. (Nordianti, 2018).

Early detection of cervical cancer using the VIA method is a cervical examination performed visually using acetic acid and seen with the naked eye to detect abnormalities after application of acetic acid or vinegar (3-5%). The advantages of the Acetic Acid Visual Inspection (VIA) method, apart from being easy and practical, can also be implemented by health workers even though the VIA screening method is suitable for simple service centers (Kustiyati, 2011).

According to the Indonesian Health Profile in 2018, most VIA examinations were carried out in Bangka Belitung Province with a total percentage of 25.42% while in East Java

Province only 8.50% of a total of 6,012,729 targets, of which 18,515 were detected positive VIA, namely white spots appeared after being carried out. examination. According to the 2019 Ponorogo District Health Profile, there were only 1,698 (1.3%) of the 129,614 who carried out early detection of cervical cancer using the VIA method. This is still very far from the target set by the government, which is 10% (Meytri, Ayun, 2017). From the data above, it shows that the awareness of conducting early detection of cervical cancer in women of childbearing age is still very low. Causative factors include the awareness of couples in early detection, as well as lack of knowledge and information about cervical cancer (Wartini, 2019).

Public knowledge about cervical cancer is very low and inactivity in early detection causes the incidence of diagnosed cervical cancer at a late stage. The delay in handling cervical cancer is due to the low level of public knowledge about the importance of VIA visits. According to Lawrence Green's Theory in Nordianti (2018), there are 3 factors that affect a person's health behavior, including: predisposing factors, enabling factors, and reinforcing factors. The predisposing factors in this study were the characteristics of the respondents (education and occupation), knowledge, attitudes of women of childbearing age about cervical cancer and socioeconomic status. Enabling factors, namely: the presence of health promotion media for health workers and distance to health facilities, reinforcing factors, namely: husband's support as a decision maker.

From the description above, the researcher wants to know about the effect of work, socio-economy, history of sexually transmitted diseases and health insurance participation on VIA visits in Ponorogo Regency.

METHOD

This type of research is analytic observation, using a case control design. The population in this study were all married women aged 30-50 years in Ponorogo Regency. The sampling technique used in this study was Cluster

Random Sampling and Proportionated Random Sampling, both for the case group and the control group. The data used are primary and secondary data. Primary data was collected through questionnaires and direct interviews with respondents, while secondary data was data on women who had undergone VIA examinations from the Ponorogo District Health Office. Data analysis includes univariate analysis, namely frequency distribution, bivariate analysis using the Chi Square test, and for multivariate analysis using Logistic Regression.

RESULTS AND DISCUSSION

Based on the results of the frequency distribution in table 1, it can be seen that of the 150 respondents who are married women aged 30-50 years in Ponorogo Regency, most of them have advanced education (SMA / PT), some 97 people (64.7%). Most of them are working women (63.3%), most women of childbearing age are working (63.3%), most of the women of childbearing age have low-moderate economic levels (60.0%). Most of the women of reproductive age did not have a history of PMS (86.0%), most women of reproductive age had health insurance (69.3%), and women of reproductive age who had already had an VIA test were 33.3.

Table 1. Frequency Distribution of Occupation, Socio-Economics, History of PMS and Health Insurance Participation in VIA

Variable	Frequency	Percentage (%)
Occupation		
Working	95	63.3
Not Working	55	36.7
Socio-Economics Level		
Low-Medium	90	60.0
High	60	40.0
History of PMS		
Don't have	129	86.0
Have	21	14.0
Health Insurance		
Don't have	46	30.7
Have	104	69.3
Visits (VIA)		
Don't do	100	66.7
Do	50	33.3

Based on table 2, it can be seen that from the Chi Square test, the p-value for the work variable and health insurance variable is 0.007, 0.008, $\alpha (0.05)$, respectively. It can be concluded that there is a significant influence between occupational variables and health insurance on visits to Visual Acetic Acid Inspection (VIA) in

married women aged 30-50 years in Ponorogo Regency.

As for the socioeconomic level variables and history of sexually transmitted diseases do not have a significant effect on the visit of Visual Inspection with Acetic Acid (VIA) in married women aged 30-50 years in Ponorogo Regency, because they have a p-value > $\alpha (0.05)$.

Table 2. The Relationship of Independent Variables with Visual Inspection with Acetic Acid (VIA) Visits in Ponorogo Regency

Independent Variable	VIA Visit						p-value	OR
	Don't do		Do		Total			
	f	%	f	%	f	%		
Occupation								
Working	71	74.7	24	25.3	95	100	0.007	2.65
Not Working	29	52.7	26	47.3	55	100		
Socio-Economics Level								
Low-Medium	64	71.1	26	28.9	90	100	0.163	1.64
High	36	60.0	24	40.0	60	100		
History of PMS								
Don't have	88	68.2	41	31.8	129	100	0.328	1.610
Have	12	57.1	9	42.9	21	100		
Health Insurance								
Don't have	38	82.6	8	17.4	46	100	0.008	3.22
Have	62	59.6	42	40.4	104	100		

Based on the results of multivariate analysis using logistic regression techniques, it can be interpreted that the variables of employment, socio-economy, and health insurance have p-value 0.047, 0.138, and 0.007 <(0.05), respectively. The highest Odd Ratio (Exp (B)) value is obtained in the health insurance participation variable with a value of 4.00. This shows that employment and health insurance have a significant effect on the visit of the Visual Acetic Acid Inspection (VIA) of married women (30-50 years) in Ponorogo Regency. Meanwhile, socio-economic variables and a history of sexually transmitted diseases did not have a significant effect on the visit of Visual Inspection with Acetic Acid (VIA) for married women (30-50 years) in Ponorogo Regency.

The results of this study indicate a p-value (0.047) on the job variable so it can be interpreted that the job variable has a significant effect on VIA visits in Ponorogo Regency. Women who work more often interact with other people, so they get more information. Therefore, it is likely that their colleagues will get information about VIA examinations. This study is in accordance with the results of research by Gatumo et al. (2018), which states that the knowledge of working women is almost twice as high as that of women who do not work. The results of this study are not in line with the research of Parapat et al. (2016) which states that work has no

statistically significant relationship with the behavior of early detection of cervical cancer using the VIA method in the working area of the Candiroto Community Health Center. Similar to Jassim's (2018) study, which states that cervical cancer screening rates are not influenced by education and employment.

In research conducted by Orang'O et al. (2016) stated that many women know that all women need to undergo cervical cancer screening, however, few women undergo cervical cancer screening because of the lack of education to encourage and correct misconceptions about early detection of cervical cancer. This requires health promotion efforts by health workers so that the coverage of cervical cancer early detection visits by visual inspection methods with acetic acid can increase. Health promotion aims to increase knowledge among women of childbearing age about the importance of early detection of cervical cancer so that it can raise awareness for early detection visits for cervical cancer by visual inspection methods with acetic acid.

People's behavior is very much influenced by economic factors. Sufficient community income will fulfill maximum needs and vice versa. So those with less income ignore their needs, including seeking health services (Central Statistics Agency, 2018). This is inversely proportional to the results of this study which

show that there is no significant influence between socio-economic and VIA visits with a p-value (0.163). The results of this study are also in line with research by Junainah (2017) which states that socioeconomic status is not a determining factor for respondents' participation in early detection of cervical cancer using the VIA method. In Wahyuni's (2013) research, it was also found that respondents who had low economic status also had good preventive behavior.

Other results are found in the research of Ningrum & Fajarsari (2013) which states that economic status affects mother's motivation to follow cervical cancer early detection through the visual inspection method with acetic acid. In the research of Chang et al., (2017) also stated that the overall household income, namely the husband's income plus the wife's income, has a significant effect on participation in early detection of cervical cancer. This can be one of the enabling factors for someone to take health measures, namely affordability of costs.

Financial support from the husband is also an important factor for women of childbearing age to visit early detection of cervical cancer by visual inspection methods with acetic acid. This is in line with research conducted by Nordianti (2018) which states that in the family, the husband / father has a very important role in making decisions and costs. Therefore the husband plays an important role in making family decisions, especially in matters of healthy living behavior. Therefore, husband's support in household finances is very influential on the behavior of early detection of cervical cancer by visual inspection method with acetic acid.

In addition, lack of awareness is another factor that affects the importance of healthy living habits and early disease prevention. So the important role of health workers in an effort to encourage healthy living behavior in the community in controlling and preventing disease. Health workers should provide information about the importance of screening for early detection of cervical cancer, besides that health workers provide examples of healthy living habits, especially in the prevention of cervical

cancer by visual inspection methods with acetic acid in local health services, so that women of childbearing age in the local area are encouraged to do the examination. early detection.

Public awareness and lack of knowledge in early detection of disease in health care centers causes the incidence of the disease to increase (Arifa et al, 2017).

The results of this study also show that there is no significant effect between a history of sexually transmitted diseases and VIA visits. This result is different from the research conducted by Nordianti (2018), which states that there is a relationship between cervical cancer risk factors and VIA examination visits ($p = 0.008$). Respondents who had cervical cancer risk factors had a greater awareness of 0.39 to do VIA visits than those who did not have cervical cancer risk factors. Research Orang'O et al. (2016) also stated that risk factors for cervical cancer in women of childbearing age can be changed or avoided (such as smoking or human papilloma virus infection), because it is important for women who have risk factors to continue early detection of cancer. cervix.

A history of sexually transmitted diseases is not a factor affecting the visit, this is possible because of many factors, including fear, shame and a lack of awareness among women of childbearing age about the importance of early detection of cervical cancer using the VIA method, especially in women who have a history of sexually transmitted diseases. Therefore, health education is very important to increase awareness of the importance of early detection of cervical cancer in women, especially in childbearing age.

Various health education media in the form of films are very effective in creating awareness and increasing the knowledge and perceptions of adult women about cervical cancer and early detection. Awareness creation is very important for the success of cervical cancer prevention programs (Horo et al., 2015).

In addition to health education media using films, illustrated leaflet media and accompanied by counseling using audio-visual media complete with animated examples by

health workers are very effective in increasing the success of cervical cancer prevention programs using the visual inspection method with acetic acid. Therefore, the intensity of health education needs to be increased so that it can increase awareness of women of childbearing age to conduct cervical cancer early detection visits by visual inspection methods with acetic acid at the nearest health service. In addition to providing health education, health workers should also be able to provide examples of behavior for early detection of cervical cancer in health services.

From the research results, it was found that there was a significant influence between health insurance participation and VIA visits ($p = 0.007$). This is because the cost of VIA visits to health services, especially at Puskesmas, can be covered by using health insurance. Although the cost of early detection of cervical cancer using the visual inspection method with acetic acid is relatively affordable, if you have health insurance, women of childbearing age can use cheaper or even free health services.

Nordianti's research (2018) also shows that there is a relationship between health insurance membership and VIA examination visits ($p = 0.004$). Respondents who have health insurance have a 9.15 times greater awareness to make VIA visits.

People with higher education levels have a higher view of the need to have health insurance to face unexpected health problems. Meanwhile, people who have low education are not aware of the level of threat that will be caused due to unexpected health problems. A person's education level has an important role in JKN membership. The higher the level of education of a person can influence the action of a planning and control to overcome an uncertain risk in the future that arises in life. So a high level of education can increase public understanding and knowledge about health insurance, so that it can lead to a high level of awareness in health insurance membership (Kusumaningrum & Azinar, 2018).

In addition, health workers also have a very important role in public knowledge about the importance of health insurance membership,

health workers should motivate people who do not have health insurance to register immediately, it is necessary to explain in depth the functions and benefits of participating in health insurance. Because by being a participant in health insurance, there are many facilities that are obtained in health services (Normajatun, Makawi., & Haliq, 2016).

CONCLUSION

The variables of employment and health insurance participation have a significant effect on the visit of the Visual Acetic Acid Inspection (VIA) of married women (30-50 years) in Ponorogo Regency. Meanwhile, socio-economic variables and a history of sexually transmitted diseases did not have a significant effect on the visit to the Visual Inspection with Acetic Acid (VIA). The health insurance participation factor is the most influencing factor for the visit of the Visual Acetic Acid Inspection (VIA). This is because the cost of VIA visits to health services, especially at Puskesmas, can be covered by using health insurance. Although the cost of VIA is relatively affordable, if you have health insurance, women of childbearing age can use cheaper health services or even without cost. Therefore it is necessary to improve facilities and infrastructure, especially for early detection of cervical cancer in health care facilities, to organize as often as possible counseling and counseling activities on early detection of cervical cancer with various health promotion media so that people are more interested and easily understand the material presented, increasing skills of health workers by participating in training on how to check for cervical cancer by methods other than the VIA method. Through these efforts, it is hoped that there will be an increase in VIA visits and a decrease in the incidence of cervical cancer.

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