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# RESEARCH

# The Relationship between Education Level and Midwives Attitude of Visual Inspection with Acetic Acid (VIA) Technique on Cervical Cancer Screening in the Public Health Center in Padang

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### Abstract

Using Visual Inspection with Acetic Acid (VIA) as one examination for cervical cancer screening not well-known among health workers in Padang. This study was conducted to know the level of knowledge and attitudes of midwives about cervical cancer screening using Visual Inspection with Acetic Acid (VIA) examination in Primary Health Center in Padang. This was a cross-sectional analytic study and has been performed in the Primary Health Center in Padang from July —August 2014. The selection of the research subjects was performed to a midwife who worked in a gynecological clinic that meets inclusion criteria. We found 48 midwives that met inclusion criteria, guided interviews were conducted with a questionnaire, data recapitulated, and computerized processed using computer software and performed statistical tests. There was a weak correlation between the level of knowledge (X) and attitude (Y) about Visual Inspection with Acetic Acid (VIA) in cervical cancer screening in Padang primary health center. With r (0,248) and signification 0.090.

Keywords: Visual Inspection with Acetic Acid (VIA), Midwife, Level Of Knowledge, Attitude

# INTRODUCTION

Cancer in Indonesia is the No. 5 cause of death in women. This is due to the increasing number of cancer patients due to the increasing life expectancy of women in Indonesia. The increase in life expectancy is associated with an increase in the socioeconomic standard of life of the community. Of the number of cancers suffered by women in Indonesia, 40% are gynecological malignancies. In Indonesia, it is estimated that 40 thousand new cases of cervical cancer are found every year. According to pathology-based cancer data in 13 pathology laboratory centers, cervical cancer is cancer that has the highest number of sufferers in Indonesia. From data from 17 hospitals in Jakarta 2007, cervical cancer ranks first, namely 432 cases among 918 cancers in women. The number of cervical cancer cases at Dr. M. Djamil Padang as a referral hospital in West Sumatra is still increasing every year. In 2007 there were 36 cases and an increase in 2008 to 42 cases, in 2009 as many as 31 cases and in 2010 as many as 33 cases of cervical cancer. The most incidence of all cervical cancer cases in 2010 at Dr. M. Djamil

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Padang came from the Padang City with 12 cases (36.36%) followed by Padang Pariaman Regency with 4 cases (12.12%).

Cervical cancer is cancer with a high incidence in women in Indonesia. Delay in diagnosis at an advanced stage, weak general condition, low socioeconomic status, limited resources, limited facilities and infrastructure, type of histopathology, and degree of education participate in determining the prognosis of the patient. This is the reason why early detection or screening for cervical cancer is important. Currently, screening is the best effort in dealing with cervical cancer, considering the many health burdens incurred to treat this cancer.

Currently, many studies on screening by VIA methods are carried out in various developing countries. Screening using the VIA method is carried out in a very simple, cheap, convenient, practical, and easy way. Some of the characteristics of this method are following the conditions of Indonesia which have economic limitations and limited health facilities and infrastructure. Therefore, the study of the use of the VIA method as a means of screening for cervical cancer in areas with limited resources is carried out as an input in the making of national health policies in Indonesia.

Chairman of the Indonesian Cancer Foundation (YKI) Adiati Arifin Siregar in 2008 expressed his concern with the high number of female deaths due to cervical cancer in Indonesia. Dissemination of cervical cancer prevention is needed to be able to change women's behavior in maintaining the health of their reproductive organs, because cervical cancer is the most preventable type of cancer, namely by avoiding risk factors, screening or early detection, and HPV vaccination. Early detection of cervical cancer can be done by the VIA method (Visual Inspection with Acetic Acid) or a pap smear examination. However, according to Emilia (2010) that social constraints related to the concept of "taboo" are one of the obstacles to cervical cancer screening tests. Meanwhile, the HPV vaccination program is still a new thing even though it was started in 2006, but its socialization has not reached a wide range of women.6 Cervical cancer and its prevention efforts are still issues that attract the attention of health professionals. The results of research by Anti Widayani (2009) in Surabaya showed that 42.9% of respondents had a high level of knowledge, 21.6% of respondents had a moderate level of knowledge, and 35.5% of respondents had a low level of knowledge about cervical cancer prevention. The results of another study by Ninik Artiningsih (2011) in Mojokerto also stated that there was a significant and positive relationship between knowledge of women of reproductive age and VIA examination as an effort to prevent cervical cancer.<sup>7</sup>

In randomized research conducted by Rathi on health workers (midwives and doctors) working in 100 public health center in 5 Jakarta areas, it was found that the level of respondents' knowledge about VIA was still lower (68.2%) compared to knowledge about screening using pap smears (99%) There are still respondents who do not know the role of VIA as an early detection method for cervical cancer because the majority of respondents still



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answer the pap smear as an early detection method for cervical cancer.4 From the research of Rathi et al, the implementation of VIA at a public health center in DKI Jakarta province is still constrained by several things; lack of outreach to public health center officers about this method, a lack of training on the implementation of this technique at the public health center, and there are still some health workers at the public health center who think screening is more appropriate for obstetric gynecology specialists.<sup>4</sup>

Regarding the implementation of the VIA technique at the public health center in the city of Padang, clear data are still not found. From a review of the 5 health centers in the city of Padang, namely the Padang Pasir, Seberang Padang, Nanggalo, Lapai, and Andalas health centers. <sup>3</sup> health centers have screened using the VIA technique and 2 of them are still doing screening using the VIA technique until now. The obstacles encountered to the implementation of cervical cancer screening using the VIA technique are; the absence of clear instructions from the provincial and city health offices regarding the implementation of VIA screening at the public health center, lack of training for health personnel, and the absence of trained personnel to conduct screening. Based on the description above, the researchers are interested in researching the relationship between the level of knowledge and attitudes of midwives regarding cervical cancer screening using the VIA technique at the public health center in Padang City.

# **METHOD**

This research is an analytic observational study using a cross-sectional design in which the independent variable and the dependent variable were examined at the same time at the Padang City Health Center in July-August 2014. The research subjects were selected who performed gynecological services at the public health center in Padang city which met the inclusion criteria as many as 48 people, conducted guided interviews with a questionnaire, the data were recapitulated, and computerized using computer software and statistical tests were carried out using unpaired t-test and if the data were not normally distributed, the Mann-Whitney test was used.

# **RESULTS**

Knowledge of Midwives regarding Visual Inspection with Acetic Acid (VIA) Techniques on cervical cancer screening at Padang City Health Center. This section describes the data regarding the knowledge of midwives in implementing Visual Inspection with Acetic Acid (VIA) Techniques on Cervical Cancer Screening at public health center in Padang. Data were obtained through a questionnaire given to midwives who performed gynecological services and met the inclusion criteria at the Padang City Health Center as many as 48 midwives.



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**Table 1.** Distribution Frequency of Knowledge of Midwives in the Implementation of Visual Inspection with Acetic Acid (VIA) Techniques on Cervical Cancer Screening at public health center in Padang.

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Knowledge Level	f	%
Well	28	58,33
Enough	13	27,08
Less	7	14,58
Total	48	100

Based on the table above it can be understood that as many as 28 people (58.33%) midwives in the city of Padang have good knowledge and as many as 7 people (14.58%) have insufficient knowledge in the implementation of the Visual Inspection with Acetic Acid (VIA) Techniques on cancer screening. Cervix at public health center in Padang. Furthermore, data will be presented per item of questions in the questionnaire given to respondents.

**Table 2.** Description per item on Knowledge Variables

No —	True		False		Total	
	f	%	f	%	f	%
1	47	98	1	2	48	100
2	48	100	0	0	48	100
3	45	94	3	6	48	100
4	42	88	6	12	48	100
5	24	50	24	50	48	100
6	38	79	10	21	48	100
7	48	100	0	0	48	100
8	23	48	25	52	48	100
9	25	52	23	48	48	100
10	20	42	28	58	48	100

Based on table 2 above, it can be seen that respondents who answered item No. 5, 8 and 10 do not reach 60%, so it can be understood that the knowledge of midwives is still lacking in this regard. Attitudes of Midwives regarding Visual Inspection with Acetic Acid (VIA) techniques on Cervical Cancer Screening at Padang City Health Center Based on the results of the questionnaire regarding the attitudes of midwives, it was found that 48 people or 100% of midwives/health workers in Padang City had a positive attitude in the implementation of the VisualAsetat Inspection Technique (VIA). on Cervical Cancer Screening at public health center in Padang Research hypothesis testing is done using Pearson Correlation data analysis techniques. The hypothesis put forward in this study is that there is a relationship between the level of knowledge (X) and the attitude (Y) of midwives at Padang City Health Center regarding cervical cancer screening using the VIA technique.

The calculation of the correlation coefficient with the Pearson Correlation data analysis technique was carried out using statistical software. The results of the calculation of the correlation coefficient can be seen in Figure 1 below.

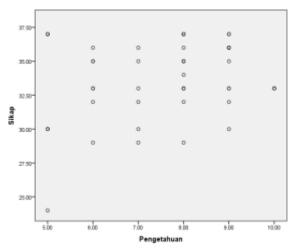


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**Figure 1.** The distribution diagram of the relationship between knowledge and attitudes of midwives regarding VIA techniques in cervical cancer screening at the Padang City Health Center.

From the results of the analysis above, it shows that the relationship between the level of knowledge (X) and the attitude (Y) of health workers at the Padang City Health Center in the implementation of cervical cancer screening using the IVA technique is 0.248 (r = 0.248) and a significance of 0.090. This means that there is a weak correlation between the knowledge and attitudes of midwives regarding the Visual Acetate Inspection (VAI) technique in cervical cancer screening at Puskesmas Kota Padang.

# **DISCUSSION**

Knowledge of Midwives regarding Visual Inspection with Acetic Acid (VIA) techniques on cervical cancer screening at Padang City Health Center.

From the knowledge questionnaire data, it was found that most (58.33%) respondents had good knowledge of VIA techniques in cervical cancer screening.

This shows that the knowledge of respondents about the Visual Inspection with Acetic Acid (VIA) techniques in cervical cancer screening is sufficient, although there are still 7 people (14.58%) with insufficient knowledge.

Notoadmojo 2005, revealed that knowledge is the result of human senses or the result of someone knowing something through their senses. It can influence someone naturally and as a basis for making rational and effective decisions in accepting new behaviors that will produce positive and negative perceptions. The higher the level of knowledge of the midwife about Visual Inspection with Acetic Acid (VIA) techniques in cervical cancer screening, the better the implementation

From the results of the questionnaire, there were still many midwives who answered incorrectly to questions 5, 8, and 10 which were questions about the basis for VIA examination. From the data above, it can be concluded that there are still many respondents



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who do not know about the basis of the VIA examination, especially regarding the duration of the VIA effect, the mechanism of action of the VIA test, and the effect of VIA in the transformation area.

This can be caused by factors that affect knowledge such as age, education, occupation, and sources of information. Increased knowledge is not obtained from formal education but can be obtained from non-formal education.<sup>8</sup>

In this study, no research was carried out on the factors that affect knowledge so that it is not known the influence of the factors that affect knowledge on the results of the research obtained. Also, sample homogenization should be carried out so that a uniform research sample is obtained to avoid bias in the results of the study.

# Attitudes of Midwives regarding the Visual Inspection with Acetic Acid (VIA) techniques on Cervical Cancer Screening at Padang City Health Center

Based on the results of the questionnaire regarding the attitudes of midwives, it was found that 48 people or 100% of midwives/health workers in Padang City had a positive attitude in the implementation of the VisualAsetat Inspection Technique (VIA) on Cervical Cancer Screening at public health center in Padang.

This shows that all respondents have a positive attitude towards the implementation of screening using the VIA technique. Attitudes can be positive and can be negative. In being positive, the tendency for action is to approach, like, expect certain objects. Whereas in a negative attitude there is a tendency to stay away, avoid, hate and dislike certain objects. Several factors can influence the respondent's attitude (personal experience, the influence of other people, cultural influence, mass media, educational institutions, emotional factors). which has been followed. 10

Whereas, in the research of Wattimena (2008), it was found that attitudes are influenced by the age factor that shows that a person's maturity is known from age as a factor to determine the ability, knowledge, perception, and attitude in acting, thinking and making decisions.<sup>11</sup>

A positive attitude in this study cannot be used as a benchmark as a good attitude because this study only examines one of the variables (knowledge) that affects attitudes, it is necessary to research the factors that influence attitudes (personal experience, the influence of others, cultural influences., mass media, educational institutions, emotional factors) so that it can be seen how the midwife's attitude towards VIA screening is.

In this study, no distinction was made between the attitudes of trained and untrained midwives so that the positive attitude of patients towards VIA in cervical cancer screening could not be distinguished.



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# Testing the research hypothesis

From the results of the analysis by calculating the correlation coefficient with the Pearson Correlation data analysis technique using statistical software, it shows that the relationship between the level of knowledge (X) and the attitude (Y) of health workers at public health center in Padang in implementing cervical cancer screening using the technique VIA of 0.248 (r = 0.248) and a significance of 0.090.

From the distribution table, it is concluded that there is a weak correlation (0.248) between the knowledge and attitudes of midwives in the implementation of the Visual Inspection with Acetic Acid (VIA) techniques on cervical cancer screening at public health center in Padang. This means that respondents' low knowledge of VIA techniques does not affect their attitudes towards screening using the VIA technique.

This weak correlation can be caused by various factors. Because in this study only research was carried out on the relationship of one of the variables (knowledge) to attitudes, it is necessary to research the factors that influence attitudes (personal experience, the influence of others, cultural influences, mass media, educational institutions, emotional factors) so that they can it is known how the relationship between knowledge and attitudes of actual midwives towards VIA screening.

# **CONCLUSION**

A total of 28 (58.33%) midwives had good knowledge and 7 people (14.58%) had less knowledge about Visual Inspection with Acetic Acid (VIA) on cervical cancer screening at public health center in Padang. All midwives had a positive attitude regarding the Visual Inspection with Acetic Acid (VIA) on cervical cancer screening at public health center in Padang. There is a weak correlation between the knowledge and attitudes of midwives regarding the Visual Inspection with Acetic Acid (VIA) techniques on cervical cancer screening at the public health center in Padang, which is 0.248 (r = 0.248) and a significance of 0.090.

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