



THE RELATIONSHIP OF DELIVERY METHOD AND FAMILY PLANNING HISTORY WITH VIA EXAMINATION RESULTS (VISUAL INSPECTION OF ACETIC ACID)

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ABSTRACT

VIA (Visual Acetic Acid Inspection) is a type of examination to detect cervical cancer. There are several factors that can cause positive VIA results and every couple of childbearing age (PUS) should carry out early detection of cervical cancer once a year, one of which is through an VIA examination. However, unfortunately there are still many couples of childbearing age who have not done so and when the examination is carried out, some of the results are positive and are even in an advanced stage. The Objective of this study was to determine the relationship between delivery method and birth control history with the results of VIA examination (visual inspection of acetic acid). This type of observational analytic research, cross-sectional design. The research population was all couple of childbearing age (PUS) in Malang Regency. The inclusion criteria were carrying out a VIA examination at the Polowijen Malang Community Health Center and having given birth. The sample consisted of 34 respondents. The research was carried out on November 8 2023. Data was collected by conducting interviews about birth methods and family planning history as well as conducting VIA examinations. Data were analyzed using the chi-square test. There is no relationship between the method of delivery and the results of the VIA examination which is statistically significant with a P value = 0.223. Vaginal delivery does not always cause cervical injury which is needed by HPV to penetrate the transformation zone which can gradually lead to precancerous lesions or positive VIA results. There is no relationship between history of family planning use and VIA examination results which is statistically significant with p value = 0.994. Women who have never used hormonal or non-hormonal contraception can also experience precancerous lesions or positive VIA examination results.

Keywords: delivery method; family planning history; via examination results

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INTRODUCTION

Cervical cancer is the second leading cause of death in women after breast cancer. This is very ironic because this cancer can actually be prevented if it is caught early, namely when precancerous lesions are found (Fontham, 2020) which can be detected through an VIA examination. It takes around 3-17 years for the cervix to change from a precancerous lesion to cancer. And every woman who has active sexual relations or who already has a partner and is aged between 30-50 years (PUS) should have early detection of cervical cancer through a pap smear or VIA examination every year. But unfortunately there are still many people who haven't done it because they feel they don't have any complaints and when they are examined they are already positive for cervical cancer and it is not uncommon to find it in an advanced stage.

Globocan data for 2020 recorded that the total cancer cases in Indonesia in 2020 reached 396,914 cases and the total deaths were 234,511 cases (Putri, 2020). In Malang Regency, there was an increase in cervical cancer cases in 2021 compared to 2020, namely 77 cases (Zamroni, 2022). The high incidence of cervical cancer needs serious attention, considering that cervical cancer can actually be prevented and treated if found early. Prevention can be done by adopting a healthy lifestyle and avoiding factors that can cause cervical cancer. For this reason, regular research is needed in accordance with current developments to find out what factors can cause cervical cancer. Apart from that, before a woman is declared positive for cervical cancer, positive VIA results will definitely be found, which in other words is still declared to have precancerous lesions, it is necessary to carry out research factors that can cause positive VIA results. The aim of this study was to determine the relationship between delivery method and birth control history with the results of an VIA examination (visual inspection of acetic acid).

METHOD

This type Observational analytical research, cross-sectional design. The population in this study were all couples of childbearing age in Malang Regency that carried out VIA examinations at the Polowijen Malang Health Center and had given birth, using accidental sampling technique, 34 respondents were obtained. The research was carried out on November 8 2023. The data on delivery methods and family planning history were collected by conducting interviews based on medical record forms for early detection of cervical cancer and breast cancer, while data on VIA examination results were obtained by carrying out VIA examinations using an VIA kit. The collected data was analyzed using chi-square.

RESULTS

Respondent characteristics are presented in the form of minimum, maximum, mean and standard deviation analysis. This aims to determine the average age score of respondents compared to the minimum assessment score.

Table 1
Description of research variable data average age of respondents

Variable	f	minimum	maximum	mean	Sd
respondent's age	34	25	60	41	7,348

Based on table 1, it is known that the average age of respondents is 41 years with a minimum age of 25 years and a maximum age of 60 years.

Table 2
Relationship between delivery method and VIA examination results

delivery method		VIA examination results					
		negative		Positive		Total	
		f	%	f	%	f	%
normal delivery		17	68	8	32	25	100
	Sectio Caesarea Delivery	8	89	1	11	9	100

P value = 0,223

Based on table 2, it is known that 89% of respondents who had a history of giving birth by SC had negative VIA examination results and 68% of respondents who gave birth vaginally or gave birth normally had VIA examination results also negative. Based on the chi square test, the p value was 0.223, which means there is no significant relationship between the method of delivery and the results of the VIA examination.

Table 3.
Relationship between family planning history and VIA examination results

		VIA examination results					
		negative		Positive		Total	
		f	%	f	%	f	%
family planning history	Hormonal	11	73	4	27	15	100
	Non Hormonal	8	73	3	27	11	100
	Never	6	75	2	25	8	100

P value = 0,994

Based on table 3, it is known that 73% of respondents who had a history of using hormonal and non-hormonal birth control both had negative VIA results, as well as respondents who had never used contraception, 75% of their VIA results were also negative with p value = 0.994, which means there were none. relationship between history of birth control use and VIA examination results.

DISCUSSION

The method of delivery is the way the baby is born. Delivery methods are divided into 2, namely normal delivery and SC (Ningsih, 2022). Normal delivery is a method of giving birth to a baby through the vagina by pushing after complete opening. In vaginal delivery, the baby is born through the cervix, thereby allowing injury or trauma to the cervix, which is one of the media for HPV to invade the cervix more deeply (Fitrisia, Khambri, Utama, and Muhammad S, 2019). The more frequently you give birth vaginally or more than 3 times, there is a 3,587 risk of experiencing cervical precancerous lesions (Rahmawati L, Ningsih MP, 2020). The results of this study are contradictory to the results of the study above because this study did not examine the number of vaginal births, besides that, according to the researchers, not all vaginal deliveries can cause cervical injury (Pasiowan S, Lontaan A, Rantung M, 2015) This wound is one of the places where HPV enters the cervix (Irianiwati, 2023) which, if not immediately detected and treated, can trigger the occurrence of precancerous lesions which can be identified through an VIA examination.

Family planning history is the respondent's history of using contraceptives. Contraceptive devices are divided into 2, there are those that contain hormones, both estrogen and progesterone hormones, for example pills, injections or implants, and there are those that do not contain hormones, for example IUDs and condoms (Abdullah S, Bawotong J, Hamel R, 2013). Hormonal contraception is one of the factors that can trigger cervical cancer, because the use of hormonal contraception can disrupt the balance of estrogen which can trigger uncontrolled cell growth, especially if you use this contraceptive for 4 years or more (Setianingsih E, Astuti Y, Aisyaroh N 2022). Apart from that, the hormone progesterone can also induce the HPV oncogene to become stable, resulting in the integration of viral DNA into the host cell genome and reducing the immunity of the transformation zone mucosa. The results of this study contradict the theory above because in table 3 only 15% of respondents who used hormonal contraceptives had positive VIA results. Apart from that, in this study the researchers did not examine how long the respondents used hormonal contraceptives, so it cannot be known for certain whether the hormones (estrogens) and progesterone) can reduce the mucosal immunity of the transformation zone from HPV, which is the first place where abnormal cells or precancerous lesions develop in the cervix (hanh-Ha D Nguyen, MD, MPH; Editor in Chief: Michel E Rivlin, MD, 2023) .

CONCLUSION

There is no statistically significant relationship between delivery method and VIA examination results with a p value of 0.223, likewise with family planning history there is also no relationship between birth control history and VIA examination results which is statistically significant with a P value = 0.994. Vaginal delivery does not always cause cervical injury, which is what HPV really needs to penetrate the transformation zone, which can gradually lead to precancerous lesions or positive VIA results. Women who have never used hormonal or non-hormonal contraception can also experience precancerous lesions or positive VIA. The weakness of this study was that it did not examine how long the respondents used contraception and the researchers also did not examine the history of cervical injury due to childbirth.

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