FACTORS INFLUENCING THE INCIDENCE OF CERVICAL CANCER IN PATIENTS AT ADAM MALIK HOSPITAL

Elvina Panjaitan [1], *Mesrida Simarmata* [2]

[1] Undergraduate study program , Mitra Husada Medan Health College , Medan , Indonesia

Correspondence address: Jl. Water Gate Psr VIII, Simp Kwala Bekala Subdistrict, Medan Johor District, Medan, North Sumatra 20142
Medan, Indonesia
Email: mesridasimarmata@gmail.com

Abstract

Background: Cancer cervix is disturbance growth mobile And is a group of diseases characterized by failure to control cell proliferation and maturation in cervical tissue . Asia Southeast occupies ranking fifth amount number incident And death the highest, namely 1.91% and 1.16% of people . **Objective:** to m analyzing Risk Factors Affecting the Occurrence of Cervical Cancer at the H. Adam Malik Central General Hospital, North Sumatra Province in 2024 **Method** : This type of research is descriptive analytical. with design study *Cross Sectional* . The population is all those who have cervical cancer at H Adam Malik Hospital. A total of 42 people with a total sampling technique of 42 people. **Results** : The age of the respondents is mostly 35-45 years old, 25 people (60%), the majority of high school education is 21 people (51%), the majority of injections are 19 people (45%), the majority of cancer stage 2 is 21 people (50%). From the analysis of the chi square test of age with the stage of cervical cancer incidence, the results of the *p value* p = 0.571 and the results of the *square test of* contraceptive use with the incidence of cervical cancer *p value = 0.401* that there is no relationship between age and contraceptive use with the stage of cancer . **Conclusion** : Factors that influence the occurrence of cervical cancer at Adam Malik Hospital in 2024 are age >35 years, high school education, users of injectable contraceptives, stage 2, there is no relationship between age and contraceptives with the stage of cervical cancer. **Suggestion:** It is recommended to do early detection through the IVA test as early as possible so that the incidence of cervical cancer can be overcome earlier

keyword : Factors, Affecting, Cancer, Cervix

INTRODUCTION

Cancer cervix is disturbance growth mobile And is a group of diseases characterized by failure to control cell proliferation and maturation in cervical tissue. The occurrence of a dysplasia process that begins with changes in the epithelium in *the scuolacolumnar junction* (SCJ) area is the beginning of this disease (Imelda and Santosa, 2020). According to data *World Health Organization* (WHO), allegedly as much as 604,000 new cases with a total of 342,000 deaths caused by by cancer cervix on year 2020. Most cancer Cervical cancer occurs in low and middle income countries (WHO, 2022). In countries with high incomes the incidence and

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mortality rates are high due to cancer cervix classified as low for example American North with number incident 0.59% And number death 0.82%. Whereas in low-income countries such as East Africa the incidence rate reaches 4.46% And number death 3.36%. Temporary That, Asia Southeast occupies ranking fifth amount number incident And death the highest, namely 1.91% and 1.16% of people (Globocan, 2020).

According to a report from *The Global Cancer Observatory* , cervical cancer is the second most common disease in women after breast cancer in Indonesia. In Indonesia, new cases of cervical cancer during 2020 were around 36,633 cases (9.2%) with a total of death 21,003 (9.0%) (Globocan, 2021). Prevalence cancer in Indonesia in 2018 reached 1.79 per 1000 population, up from 1.4 per 1000 population in 2013. The highest cancer prevalence rate is in the DI Yogyakarta region with a percentage of 4.1%. Then, Central Java follows with a percentage of 2.1%, followed by Bali with 2%, and Bengkulu And DKI Jakarta, each own number prevalence of 1.9%. Meanwhile, at RSUP H Adam Malik in 2023 there were 247 cases. *Human Papilloma Virus* (HPV) is the main cause that contributes to the highest percentage of cervical cancer, which is around 99.7%. This virus has the ability to infect cells on the surface of the skin. This virus has the ability to infect cells on the skin. There are two types of HPV viruses that can be distinguished, namely high-risk HPV viruses such as types 16, 18, 31, 33, and 45, and low-risk HPV viruses which generally cause genital warts (Kirana, 2022).

Risk factors for cervical cancer can be divided into two categories, namely modifiable and unmodifiable factors. changed covers status economy, level education, amount parity, age at first marriage, history of number of sexual partners, use of hormonal contraception, smoking habits, and use of vaginal cleansers. From results studies Which done by Situmorang, Mr.

Nugroho, Winarni, and Mawani (2020) obtained that status economy influential with intake nutrition, immunity, prevention cancer cervix. In line with In this study, the level of education of patients was also influenced by economic status. will affect attention And prevention to cancer cervix (Naufaldi, Gunawan, and Halim, 2022). Then, from the results of a study conducted by Kasamatsu et al. (2018), there were significant results between the number of sexual partners and the occurrence of cervical cancer. According to the results of a study of cervical cancer risk factors by Fitrisia, Khambri, Utama, and Muhammad (2019), the risk of being exposed to cervical cancer will increase 2.5 times greater if you have a parity of >3 children, 7 times greater if use cleaner vagina, >10 time if do sexual intercourse at the age of 15-19 years. This is also supported by research Which done by Grace And Ningsih (2020), It was found that on average, patients who received treatment for cervical cancer had sexual intercourse at an age of <20 year. Use contraception hormonal Also own strong relationship to cervical cancer (Utomo, Afandi, and Bahri, 2020). Then from a study conducted by Khabibah, Adyani, and Rahmawati (2022) it was found that active smokers increase the risk of contracting HPV by 1.45 times. While non-modifiable factors include age and family history. with malignancy.

According to results studies factor risk cancer Cervical cancer by Fitrisia, Khambri, Utama, and Muhammad (2019) in women aged >35 years, will experience a two-fold increase in the incidence of cervical cancer. In addition, the possibility of cervical cancer is also greater in individuals with a family history of cervical cancer, which is 3.38 times greater than in women who do not have a family history (Chairani, 2018). Adam Malik General Hospital is a class A health facility and is the main referral center in North Sumatra Province . The facilities available

at this hospital are very complete, and many cases of cervical cancer have been diagnosed and treated at this hospital.

From the results of a survey conducted by researchers on April 6, 2024, there were 42 cervical cancer patients. Based on the general description of cervical cancer and the increase in cases of cervical cancer in North Sumatra Province , researchers are interested in conducting study about "Factors Affecting the Incidence of Cervical Cancer in Patients at the H. Adam Malik Central General Hospital, North Sumatra Province in 2024"

METHOD

This type of research is descriptive analytical. with design study *Cross Sectional* . The population is all those who have cervical cancer. A total of 42 people with a total sampling technique of 42 people . Place: At Adam Malik Hospital. Time: April-May 2024. Univariate data analysis is frequency distribution and bivariate data analysis is chi square.

RESULT AND DISCUSSION

Table 1. Frequency Distribution of Respondent Characteristics at Adam Malik General Hospital, North Sumatra Province in 2024

No	**Age**	**f**	**%**
1	20-35 years	4	10
2	35-45 years	25	60
3	>45 years	13	30
	Total	**42**	**100**
No	**Education**	**f**	**%**
1	SD	2	5
2	JUNIOR HIGH SCHOOL	14	33
3	SENIOR HIGH SCHOOL	21	51
4	Diploma	5	12
	Total	42	100
NO	**Use of KB**	**f**	**%**
1	Pill	15	36

2	Inject	19	45
3	Implant	8	20
	Total	42	100
NO	**Cancer Stage**		
1	Stage 1	12	29
2	Stage 2	21	50
3	Stage 3	7	17
4	Stage 4	2	5
	Total	**42**	**100**

1. Univariate Analysis

Based on Table 1. The age of the respondents, the majority of respondents were 35-45 years old, as many as 25 people (60%), the majority of high school education, 21 people (51%), the majority of injections, 19 people (45%), the majority of cancer stage 2, as many as 21 people (50%).

2. Bivariate Analysis

Table 2 Cross Tabulation of the Relationship between Age and Cervical Cancer Stage at Haji Adam Malik General Hospital, North Sumatra Province in 2024

NO	Age	Cervical Cancer Stages										P Value
		Stadium 1		Stadium 2		Stadium 3		Stadium 4		Total		
		f	%	f	%	f	%	f	%	f	%	0.571
1	20-35 tahun	0	0	4	10	0	0	0	0	4	10	
2	>35 -45 tahun	8	19	11	26	5	12	1	2	25	60	
3	>45 years	4	10	6	14	2	5	1	2	13	30	
		12	29	21	50	7	17	2	4	42	100	

, the p value p = 0.571 was obtained that there was no relationship between age and cancer stage at H Adam Malik General Hospital, Medan, North Sumatra Province in 2024.

Table 3 Cross Tabulation of Contraceptive Use with Cervical Cancer Stage at Haji Adam Malik General Hospital, North Sumatra Province in 2024

NO	Age	Use of contraceptives										P Value
		Stage 1		Stage 2		Stage 3		Stage 4		Total		
		f	%	f	%	f	%	f	%	f	%	0.401
1	20-35 years	4	10	7	17	2	5	2	5	15	37	
2	>35 -45 years	4	10	11	26	4	10	0	0	19	45	
3	>45 years	4	10	3	7	1	2	0	0	8	18	
		12	30	21	50	7	17	2	5	42	100	

Based on table 4.6. the majority of cancer stages are in stage 2 as many as 11 people (26%) with respondents using contraceptive injections. From the chi square test analysis, the *p value p = 0.401 was found* that there was no relationship between contraceptive use and cancer stage at H Adam Malik General Hospital, Medan, North Sumatra Province in 2024.

DISCUSSION

1. Relationship between age and cancer stage

Based on table 4.6. The majority of respondents aged >35 years -45 years with stage 1. From the chi square test analysis, the *p value p = 0.571 was obtained* that there was no relationship between age and cancer stage at H Adam Malik General Hospital, Medan, North Sumatra Province in 2024. Other studies have shown that cervical cancer is not related to the incidence of cervical cancer, but age at first marriage can be a risk factor for cervical cancer (Hidayah et al., 2021; Tuncer & Tuncer, 2020) . The older you get, the lower your body's knowledge, but early detection of the cervix through the IVA test is very helpful in detecting cervical cancer early.

2. Relationship between Hormonal Contraceptive Use and Cancer Stage

Based on table 4.6. the majority of cancer stages are in stage 2 as many as 11 people (26%) with respondents using contraceptive injections. From the chi square test analysis, the results of the p *value p = 0.401 showed* that there was no relationship between contraceptive use and cancer stage at H Adam Malik General Hospital, Medan,

North Sumatra Province in 2024. The results of this study do not match the previous journal that there was no effect of contraceptive use on the incidence of cervical cancer (Magfirah & Wijaya, 2023) . However, there was also a previous study that found that there was an effect of contraceptive use on the incidence of cervical cancer (Mustikarani, 2020) . Hormonal contraceptives can affect the hormone cycle in our bodies, but there are still many risk factors for cancer apart from hormones.

CONCLUSION AND SUGGESTION

From the results of a study conducted at Adam Malik General Hospital, Medan, North Sumatra Province in 2024, cervical cancer mostly occurs at the age of >35 years, high school education, using injectable contraceptives, stage 2. There is no relationship between age, hormonal contraception and the stage of cervical cancer at Adam Malik General Hospital, Medan .

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