



Relationship Between Women's Characteristics With Cervic Cancer Incidence

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ABSTRACT

In Indonesia, every year more than 15,000 cases of cervical cancer are detected, and around 8,000 cases of them die. The incidence of cervical cancer in Indonesia in 2011 reached 100 per 100,000 population per year. To determine the relationship between female characteristics and the incidence of cervical cancer in patients in the gynecology room of the Gatot Soebroto Army Hospital in 2022. This research is a quantitative study with a case control design using primary data with a sample of 58 patients on the 2nd floor of the gynecology room. The sampling technique uses random sampling. Data analysis using univariate and bivariate using chi square. The variables associated with the incidence of cervical cancer were HPV vaccination ($p=0.002$), early detection of cervical cancer ($p=0.003$), history of smoking ($p=0.009$), history of vaginal discharge ($p=0.014$) and age at first sexual intercourse ($p=0.004$) with the incidence of cervical cancer, while variables that had no relationship were history of contraception (0.738). There is a relationship between HPV vaccination, early detection of cervical cancer, history of smoking, history of vaginal discharge and age at first sexual intercourse with the incidence of cervical cancer. It is expected to increase women's knowledge about the factors associated with the incidence of cervical cancer.

Keywords: Cancer, Cervical, Vaccine, Marriage

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INTRODUCTION

According to WHO, in 2019 there were 270,000 women die Because cancer cervix and death of these 85% occur in countries with income low or medium. Every year incident cancer cervix increased 3.1% in 2018. Found around 200,000 deaths related cancer cervix and 46,000 of them is woman aged 15-49 years living in developing countries. ¹ In Indonesia, each year detected more than 15,000 cases cancer cervix , and about 8,000 cases among them died. Incidence rate cancer cervical cancer in Indonesia in 2011 reached 100 per 100,000 population per year. This figure is predictable will Keep going increased 25% in period 10 years time future If No quick prevention. ²

Results data Riskesdas 2013 and 2018 shows exists enhancement prevalence cancer in Indonesia from 1.4% to 1.49%. DKI Jakarta occupies order 8th most sufferer cancer cervix in Indonesia namely as much as 15.8 %, up with year 2020 from results IVA examination has found 50,171 IVA positive and 5,847 suspicious cervical cancer³

Cancer cervix is cancer in the area cervix or neck womb as consequence exists growth network that doesn't controlled and destructive surrounding normal tissue. Disease This caused by infection with the Human Papilloma Virus (HPV). Type of cancer This is the most common cancer attack women in the world, even cancer cervix occupy order second reason death the most after cardiovascular disease. ⁴ Cancer cervix started with infection of the Human Papilloma Virus (HPV). Infected HPV virus to body initiate happening change growth abnormal cells, to happen cancer. The HPV virus is spread through contact skin with areas infected with HPV, incl connection sexual through the vagina, anus, or mouth. Infection Infectious Other sexual (STI) without adequate treatment suspected speed up development of HPV. Impact disease cancer and its treatment can influence life patient Good from facet ability For fulfil role in family, ability For work and influence life social patient . Desire For healing and success something treatment of patients cancer can influenced by perception about the disease (*illness perception*).⁵

Influencing factors happening cancer cervix consists from age, parity, age first time in touch sex, style live, use hormonal contraception. Age First do connection sex at age under 17 years stimulate growth cell tool cancer content girl. Research conducted by Putra in 2012 stated that incident lesion pre cancer cervical and over marriage <21 years own ratio prevalence by 2.11 times more big than age marriage > 20 years . Hormonal contraceptives trigger happening epithelial changes cervix suspected because estrogen induces oncogenesis in a manner directly on the epithelium cervix. Study Parwati, et al 2015 found results that women who use hormonal contraception > 5 years own risk 10.7 times more tall experience lesion pre cancer cervix compared to with those that don't use hormonal contraception ⁶

Habit smoking also increases risk happening cancer cervical. Cigarette can hinder response proper immunity against the HPV virus. HPV -infected cervical cells (those that have risky become cancer) is

increasing easy changed become cancer Because exposed carcinogens in cigarettes. Because it's a carcinogen as causative agent cancer Work damage the DNA of existing cells infected HPV germs. smoking woman own risk 2 times more big compared to woman who isn't smoker For experience cervical cancer ⁷

Government program about detection early cancer cervix Already listed in the Decree of the Minister of Health of the Republic of Indonesia Number 796/MENKES/SK/VII/2010 concerning guidelines technical control cancer breast and cancer cervical. Detection program early cancer the intended cervix in regulation This that is inspection Acetic Acid Visual Inspection (IVA). Government target, in 2014 prevention and control cancer cervix can reach almost whole province . In 2014 25% district / city can do detection early to cancer cervix with target 80% women age fertile (WUS) aged 15-49 years has do detection early cervical cancer ⁸

Prevention cancer the most effective cervix is through VIA examination . The IVA method is more effective and efficient For detection early cancer cervix Because cost cheap and easy midwife or officer health center. IVA examination was carried out with method taking mucus on the vaginal wall then smeared with sour acetate 3- 5%. If No There is change color so considered No There is cervical infection. The IVA examination was carried out above chair check content, the vagina is opened with speculum *grave* Then cervix smeared sour acetate. Function from sour acetate is raises dehydration cells that make protein clumping , so cell high protein cancer will changed color turn white ⁹.

Study related risk use hormonal contraception and history of STIs with incident lesion pre-cancer cervix Once carried out in Denpasar City. Study This carried out at North Denpasar Health Center I and South Denpasar Health Center II with consideration North Denpasar Health Center I has PUS with The highest hormonal acceptors were in Denpasar in 2013, namely 40.3%. South Denpasar Health Center II is Public health center with STI visits exceeded Public health center other that is in 2012 by 15 % and 17% in 2013. Several perceived symptoms sufferer cancer cervix including vaginal discharge that is not normal, smells, itches, feelings heat in the vagina and so on, thing This is one symptom from exists infectious disease . ¹⁰

The preliminary study conducted, obtained amount sufferer cancer cervix at the Gatot Soebroto Army Hospital in 3 months final June, July and August 2022 continues increases, is found the number in June was 21 (13.7%), July was 21 (15.9%) and August was 25 (17.7%) people, cancer cervix also occupies order the most third from disease gynecology at the Gatot Soberoto Army Hospital (Record Data Gatot Soebroto Army Hospital Medical Center year 2022). Based on background behind the writer interested For researching about connection characteristics Woman with incident cancer cervix in patients in the Gynecology Room of the Gatot Soebroto Army Hospital Year 2022.

METHOD

Study This is something studies quantitative with design *case control* with using primary data with sample a total of 58 patients on the 2nd floor of the *gynecology room* . Retrieval technique sample use it *random sampling* . Data analysis using *univariate* and *bivariate* uses *chi square*.

RESULTS

Table 1 Distribution Frequency Incident Cancer Cervix

Variable	Cancer cervix			
	case		Control	
	<i>f</i>	%	<i>f</i>	%
HPV Vaccination				
No	26	89.7	15	51,7
Yes	3	10,3	14	48,3
Early Detection of cancer cervix				
No	26	89.7	16	55,2
Yes	3	10,3	13	44.8
Smoking History				
No	10	34.5	20	51,7
Yes	19	65.5	9	31.0
History of vaginal discharge				
No	6	20,7	15	51,7
Yes	23	79.3	14	48,3
Contraceptive History				
No birth control / non-hormonal birth control	5	17,2	6	20,7
Hormonal	24	82.8	23	79.3
Age First Time Contact sexual				
< 20 years	18	62,1	7	24,1
≥ 20 years	11	37,9	22	75.9

Based on table 1, events cancer cervix by 29 respondents (50%) respondents No HPV vaccination by 41 (70.7%). Respondents group case No do HPV vaccination is 26 (89.7%) . Respondents group case No do detection early cancer cervix namely 26 (89.7%), Respondents group case own history smoke namely 19 (65.5%) . Respondents group case own history vaginal discharge namely 23 (79.3%) . Respondents in groups case own history hormonal contraception , namely 24 (82.8%). Respondents in groups case age first time doing connection sex < 20 years as big 18 (62.1%).

Table 2 Relationship between HPV Vaccination and Cervical Cancer

HPV Vaccination	Cancer cervix				<i>P-value</i>	OR
	case		Control			
	<i>n</i>	%	<i>n</i>	%		
No	26	89.7	15	51,7	0.004	8.08
Yes	3	10,3	14	48,3		
Total	29	100	29	100		

Table 2 exists connection between HPV vaccination with incident cancer $p = 0.004$ ($p < 0.05$), with value OR = 18.0 means respondents who did not do HPV vaccination is at risk of 18 times experiencing cancer cervix compared to respondents who did HPV vaccination.

Table 3
Correlation between Early Detection of Cervical Cancer and Incidence of Cervical Cancer

Early Detection	Cancer cervix				P-value	OR
	case		Control			
	n	%	n	%		
No	26	89.7	16	55,2	0.006	7.04
Yes	3	10,3	13	44.8		
Total	29	100	29	100		

Table 3 exists connection between early detection of cervical cancer through IVA Test/Pap Smear with incident cancer cervix $p = 0.006$ ($p < 0.05$) with OR value = 7.04 means those who do not do early detection of cervical cancer at risk 7 times experienced cancer cervix compared to the respondents for early detection.

Table 4
Relationship between Smoking History and Cervical Cancer

Smoking History	Cancer cervix				P-value	OR
	case		Control			
	n	%	n	%		
Yes	19	65.5	9	31.0	0.018	4,2
No	10	34.5	20	69.0		
Total	29	100	29	100		

Table 4 exists connection between respondents who have smoking history with incident cancer cervix $p = 0.018$ ($p < 0.05$) with OR value = 4.2 It means respondent with smoking history is at risk 4.2 times experienced cancer cervix than non- smokers respondents.

Table 5
The Relationship between History of Leucorrhoea and the Incidence of Cervical Cancer

History of vaginal discharge	Cancer cervix				P-value	OR
	case		Control			
	n	%	n	%		
Yes	23	79.3	14	48,3	0.029	4,1
No	6	20,7	15	51,7		
Total	29	100	29	100		

Table 5 There is a relationship between history vaginal discharge with incident cancer cervix $p = 0.029$ ($p < 0.05$), with OR value = 4.1 It means respondents who have history vaginal discharge risky 4.1 times suffered cancer cervix from the respondents who did not There is vaginal discharge.

Table 6
Relationship History of Contraception with Incident Cancer cervix

Contraceptive History	Cancer cervix				P-value	OR (95% CI)
	case		Control			
	n	%	n	%		
No						
Having non-hormonal KB/KB	5	17,2	6	20,7	0.738	-
Hormonal	24	82.8	23	79.3		
Total	29	100	29	100		

Table 6 Nothing connection between contraceptive history with incident cancer cervix $p = 0.738$ mean ($p > 0.05$).

Table 7
Relationship Age first had sexual intercourse with Genesis Cervical cancer

Age at first sexual intercourse	Cancer cervix				P-value	OR
	case		Control			
	n	%	n	%		
<20 years	18	62,1	7	24,1	0.008	5,1
>20 years	11	37,9	22	75,1		
Total	29	100	29	100		

Table 7 There is a relationship between the age at first sexual intercourse and the incidence of cervical cancer $p = 0.008$ ($p < 0.05$) with OR value = 5.1 It means Respondents who had sexual intercourse for the first time <20 years were at risk 5.1 times experienced cancer cervix.

DISCUSSION

1. The relationship between HPV vaccination and the incidence of cervical cancer

Based on results study this, respondents who experienced cancer cervical and not experience cancer cervix is not do HPV vaccination. There is a meaningful relationship between HPV vaccination with cancer cervical, so can said that respondents who did not do HPV vaccination is at risk experience cancer cervical.

The course of cervical cancer is preceded by Oncogenic HPV infection (malignant HPV virus) which causes normal cervical cells to become precancerous cells, and then multiply again to become cancer cells. It takes a long time to become a cancer cell and become cervical cancer, at least it takes years but it does not rule out the possibility that it can take place in less than a year¹¹

Research conducted by Evriarti in 2019 regarding the pathogenesis of HPV in cervical cancer showed that the mechanism of HPV in causing cervical cancer is a fairly complex mechanism and involves important proteins present in the HPV genome. Another study conducted by Setiawati in 2014 with title Human Papilloma Virus And Cancer Cervix, HPV, Human Papilloma Virus, can infect male

and female . Login to in body man through connection sexual. Several strains of HPV cause disease known gender with name condyloma accuminata or warts gender. Some of the other strains, especially types 16 and 18, are oncogenic or can cause cancer.¹²

HPV vaccine or vaccine For cancer cervix is developed vaccine For protect against certain Human Papilloma Virus (HPV). HPV vaccination is one effort primary prevention for protect woman from cancer cervical. Vaccine This Already stated safe and effective For woman aged 9-26 years who have not Marry or Not yet active in a manner sexual. On results research that has done the HPV vaccine will prevent about 75% cancer cervix in a manner whole and 100% of cancer cervical, warts in the area gender and change precancer from cervix.¹³

Vaccination done with Enter antibody serum to in body . On vaccines cancer cervix , which is inserted is part of the HPV virus viz skin / shell that has been purified and dissolved in fluid certain so that Can stimulate body For produce antibodies / substances immunity body against HPV. Height serum antibody level This correlated with level infected exposure (area). so that make antibody Work neutralize the virus and prevent entry of the virus into in cells.¹⁴

The more low antibodies / substances immunity body against HPV is increasing risky exposed to the Human Papilloma Virus (HPV). Prevention beginning from cancer cervix is with do HPV vaccination , HPV vaccine for protect to certain types of Human Papilloma Virus (HPV).

2. Relationship between Early Detection of Cervical Cancer and the incidence of cervical cancer

Based on results study experienced respondents cancer cervical and not experience cancer cervix is not do detection early. There is a meaningful relationship between detection early with cancer cervical, so can said that respondents who did not do detection early risky experience cancer cervical .

Based on results study is known that There is the relationship between detection early cancer cervix with Pap Smear or IVA Test with incident cancer cervical .

Research results This in line with research conducted by Ramadini 2018 with results There is meaningful relationship between detection early (pap smear) with incident cancer cervix ($p=0.012$), results study this is also in line with research conducted by Melva (2008) at H. Adam Malik General Hospital Medan which obtained the p value is 0.016 which means there is significant relationship between patient ever do detection early (pap smear) with sufferers who don't Once do detection early (pap smear).¹⁵

The amount active woman do connection no sexual Once do detection early will influence the more height number incident cancer cervix, resulting lack of knowledge and awareness woman in do detection early cancer cervix (pap smear).¹⁵

Pap smear examination is inspection For know exists abnormal cells within uterus. Recommended all for sexualized woman active should do pap smears regular. Pap smear test for first time must done

quick after woman the start active do connection sexual and must repeated after One year, because abnormal cells can missed from one check. ¹⁶

Pap Smear is inspection cytology simple fast and no Sick with level enough sensitivity good and belonging relatively cheap, effective lower number events and deaths consequence cancer cervical. Sufferer cancer cervix in 30% of cases found at the time screening *PapSmear*. Through PAP smear cancer cervix can prevented (*Preventable Disease*). Although results test *PAP smear* has proven beneficial for invention early cancer cervix However its use in a manner national Still is problem big 16

Research 2018 is necessary done IVA method for detect early cancer cervix because respondents (WUS) with Parity third or more have increased risk / category risky experience cancer cervix ¹⁷

With do detection early can detect happening cancer cervix more early, so governance handling the disease can more quick to do, if more fast known and handled so Can the treatment will more optimal of course increase number success treatment.

3. The relationship between smoking history and the incidence of cervical cancer

Research results is known that experienced respondents cancer cervix those who have a history of smoking and those who do not experience cancer cervix is No have a history of smoking. There is a significant relationship between smoking history with cancer cervical, so can said that respondents who have a history of smoking risky experience cancer cervical.

Smoke is burn later paste sucked the smoke, fine use cigarette nor using a pipe. Smoke is something existing activity No foreign Again heard, so many can We meet the people who do. Activities so called smoking as smoker. ⁷

Cigarette burned Then suck cigarettes, then He will at a time suck ingredients chemicals released by cigarettes the When cigarettes burned, then the smoke will too fly around smoker. Flying smoke it also contains hazardous materials, if the smoke sucked in by existing people around so will dangerous for too himself although no smoking. ¹⁸

Smoke can lower Power stand body. Many studies say connection habit smoke can increase risk happening cancer cervical. In research conducted at the Karolinska Institute in Sweden which was published by the British Journal Cancer in 2001. Substance nicotine as well as incoming poison into the blood through cigarette smoke can increase possibility happening conditions or cervical neoplasia growth abnormal cells in the cervix. ⁵

Dewi 2013 in the work area from two health centers elected in Bali, that there is connection between exposure to cigarette smoke with incident lesion pre cancer cervix ($p=0.0001$). Another study by Nindrea (2017) in Palembang on all woman Worker Sex Medicinal commercial to hospital. Dr. Mohammad Hoesin Palembang, also available connection between exposure to cigarette smoke with incident lesion pre cancer cervix ($p=0.032$). research conducted by Chairani (2018) obtained exact result

No in accordance with results on research this, that No there is connection between exposure to cigarette smoke with incident lesion pre cancer cervix ($p=0.346$).⁸

A number of mechanism molecular has believed that smoke can contribute to carcinogenesis of the cervix involving direct exposure to inner DNA cells epithelium cervical . Cigarette smoke from One stem cigarette contains tar, nicotine , carbon dioxide , benzo[a]pyrene (BAP) and ingredients chemistry dangerous other with amount reach thousands and effects direct ingredients it on the cervix is lowered immune status local and upgrade possibility integration of viral DNA into in genome host . Effect period long his is proliferation cellular disrupted , inhibit apoptosis & stimulation factor growth endothelium vascular with enhancement density vessels blood micro. So that can be a co- carcinogen eventual infection with the HPV virus damage epithelium cervix and causes neoplasm or population cell cervical cancer.¹⁹

A study show, slime cervix in women smoker contain nicotine and substances substance other contained in cigarette . Substance substance the will lower Power stand cervix beside is carcinogen a viral infection that impairs the immune system and affects ability body For oppose HPV infection of the cervix.⁷

In the cigarette there is material chemical nature carcinogenic to body. Chemical properties carcinogenic the Can trigger growth cells cancer inside body, and if smoking woman cell cancer the will grow in cells epithelium cervix which if smoking longer will Keep going increase cells cancer that's what causes it a woman can suffer cancer cervix.

4. The relationship between history of vaginal discharge and the incidence of cervical cancer

Research results is known that respondent that happened cancer cervix There is history vaginal discharge , while those that are not happen cancer cervix is not There is history vaginal discharge There is a relationship between history vaginal discharge with incident cancer. Cervical, so can said that existing respondents history vaginal discharge risky happen cancer cervical.

Research results This in line with research conducted by Paremajangga 2019 is the result show there is connection between factor history vaginal discharge pathological with incident lesion precancer cervix ($p=0.021$) and also in line with research conducted by Nindrea who researched about prevalence and influencing factors lesion precancer cervix , shows that there is connection between history vaginal discharge pathological with incident lesion precancer with p - value = 0.000.²⁰

Vaginal discharge pathological is form marked vaginal discharge with amount profuse , colored vaginal discharge white, yellow until greenish, smelly, causing itching and pain. Vaginal discharge pathological caused because inflammation tools sex consequence infection by microorganisms like the fungus *Candida albicans*, the bacterium *Neisseria gonorrhoeae*, and the parasite *Trichomonas vaginalis* and are also symptom exists disease in the uterine organs like cancer cervix and others.²⁰

History factor vaginal discharge pathological is factor risk happening incident lesion precancer cervix and women who have experience history vaginal discharge pathological have risk three times more big For suffer lesion precancer cervix compared to with women who don't Once experience history vaginal discharge pathological . In principle , in the vagina there is various type bacteria , and some big is lactobacillus bacteria (bacteria well) and the rest bacteria pathogens (bacteria reason disease).²¹

Lactobacillus bacteria play a role important in guard vaginal environment ie with produce hydrogen peroxide which normalizes vaginal pH (3.8-4.5). At this pH , bacteria that are pathogen will easy killed so that spared from genital infection. However if vaginal pH conditions are in condition not normal, then microorganisms pathogen will grow and develop as well as hinder lactobacillus bacteria produce hydrogen peroxide so in the circumstances the HPV can with easy enter to in cervical. Besides that , there is infection of the genital area affects lack of ability body For oppose HPV infection so that HPV with easy infect cervical. That 's what causes history vaginal discharge pathological potentially cause happening lesion cervical precancer.²¹

Based on results analysis the concluded that woman ever experience vaginal discharge pathological risky one hundred nine times more big suffer lesion precancer cervix compared to with women who don't Once experience vaginal discharge pathological . Based on results study this is for women still maintain the PH of the reproductive organs with method still guard cleanliness yourself, diligently replace trousers deep and not use product cleaner area womanhood Because can disrupts the pH of the surroundings.²¹

In women with history vaginal discharge, condition her vagina experience PH abnormality that can kill the normal flora that it should guard health tool reproduction women , if the normal flora dies and vaginal discharge No handled with Good so Can trigger bacteria or a virus that should No in the vagina, one of which is the HPV virus that can trigger cancer cervix.

5. Relationship History of Contraception with Incident Cancer Cervix

Research results is known that respondent that happened cancer cervix with history non-hormonal contraception, while those that are not happen cancer cervix is historical hormonal contraception. Nothing connection between history contraception with incident cancer cervical.

Research results This No in line with research conducted by Wanda, et al in 2017 which results is There is connection usage hormonal contraceptives with incident cancer cervix (0.003).

Kindly theoretical possible mechanism role that is change in mucus capable cervix add vulnerability network, change from response increased immunity vulnerability to viral infection, deficiency folate inside cervix so that can stimulate development lesion abnormal cervix.¹⁰

Estrogen hormone works stimulate growth prone cells push happening disease cancer , meanwhile hormone progesterone protect happening growth excess cells in body. There is a trend that someone too

much estrogen hormone and deficiency hormone progesterone cause increasing risk cancer breast, cancer cervix, cancer uterus and cancer prostate from fruit penis man. One limitations progestin contraception that is on use period long can raises vaginal dryness, reduction vaginal discharge causes irritation and pain moment relate intimacy that causes more vaginal infections prone to occur. ⁵

Research results J. Green published in *british of journal* state that oral contraceptives have a risk of 1.70 times suffering cancer cervix compared with someone who doesn't Once use oral contraceptives. Research conducted by Mansah 2005 that use oral contraceptives (birth control pills) show value OR=1.632 means that use oral contraceptives have a risk of 1,632 times suffering cancer cervix compared with people not Once use contraception. ¹⁸

Hormonal contraceptives are one method used For prevent happening happen pregnancy with show hormonal drugs. Contraception This got of the hormones estrogen and progesterone produced by the body self / endogenous and prodogenous factors in a manner most extensive exogenous synthesis used as contraception are the hormones estrogen and progesterone give profit more many. With entry hormonal contraception inside body so function secretion actor opposite cervix with actor nature of the cervix physiological ie turbid, viscous and amount little meant For complicate entry sperm through cervical, so potentially raises cervical cancer. ²²

Hormonal contraceptives contain synthesis of the two hormones that are produced in a manner experience in body woman that is estrogen and progestin, meanwhile increase in estrogen and progestin No become reason main happening cancer cervical, but only become trigger.

6. Relationship Age at first sexual intercourse with the incidence of cervical cancer

Research results is known that respondent that happened cancer cervix is with age first time doing connection sexual <20 years , while those who are not happen cancer cervix is with age first time doing connection sexual \geq 20 years. There is a relationship between age first time doing connection sexual with incident cancer cervical , so can said that aged respondents first time doing connection sex < 20 years risky happen cancer cervical .

Research results This in line with research conducted by Wanda, et al in 2017 which results is there is connection age First have intercourse with incident cancer cervix (0.010). Study this is also in line with research conducted by Melva, that there is connection age First do connection sexual with incident cancer cervix (p=0.000).

Research conducted by Darmayanti (2015) found same result with the researchers do, ie there is connection age First do connection sexual with incident cancer cervix (p=0.001). At risk age in study. This is If a woman carry out marriage at the age of <20 years. this caused Because the more young age carry out marriage so possibility big caught cancer cervix more fast and easy compared to with those who marry at a ripe age. At age young cells womb Still Not yet ripe so that cell the No range to

substances chemical carried by sperm and all type the change . If not ripe, yes just when There is growing stimulus No balanced with dead cells . With so excess cell This Can changed become cell cancer. Period prone to This relate with tips metaplastic process in age puberty , so when There is something that interferes with the process of metaplasia for example infection will make it easy conversion of the metaplastic process to malignancy. ²³

From the results analysis carried out there is connection age First do connection sexual with incident cancer cervical. this Can prevented with No do sex free and share Woman married at the minimum age of 21 years in accordance with ideal age for girls marriage stipulated by the BKKBN. Besides that necessity role government for more intense in empower Woman with establish trainings Skills to Woman so girls the own skill For Work in a manner independent and owned income alone . Besides that government expected create a program that can add knowledge public about health reproduction assisted by TOMA and apparatus government other in run the program . Besides that exists role family expected Can support government programs, so decrease women who marry early. ¹¹

According to experts effective intercourse that is If done when Already stepped on 20 years old and that too should be in bond official marriage. at this time cancer cervix is disease that is feared by everyone girl and now will threatening the girls downstairs age at intercourse. Intercourse on age young (< 20 years) is said can cause cancer cervix because at age the change cell in mouth womb currently in very active phase, when cell split in a manner active (metaplastic) no can There is contact or stimulation whatever from outside including object foreign like tool sex man and cell sperm . Enter object foreign the cause development cell to be abnormal. ²⁴

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CONCLUSION

Incident cancer cervix as many as 29 respondents, there connection between the HPV vaccination variable, the detection variable early cancer cervix, historical variables smoking, variable history vaginal discharge, variable age first time doing connection sexual with incident cancer cervical, no There is connection between history contraception with incident cancer cervical ($p=0.738$), with the most dominant variable is the variable of HPV vaccination.

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