



## Risk Factors Of Sexual Patterns In Nfertile Women Of Cervic Lessons

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### ABSTRACT

**Background:** The incidence of cervical lesions that can progress to cervical cancer is estimated at 100 per 100,000 population. In 2013, cervical cancer was the most common cancer in Indonesia (0.8%). The incidence of cervical cancer in Magelang Regency in 2018 reached 2.3%, higher than the incidence in Central Java Province. This study aims to determine the magnitude of the risk factors for cervical lesions due to sexuality patterns in the Magelang Regency area. The purpose of this study was to determine several risk factors for the occurrence of cervical lesions and to find out what factors had the most influence on these events in Magelang Regency in 2020. By knowing the risk factors, the public knew to anticipate them.

**Methods:** This study uses an analytical survey. The population of this study were all women who had partners of childbearing age. Samples were taken using accidental sampling, namely patients who did VIA examinations at independent practice midwives in the Magelang Regency area.

**Results:** factors that did not affect the incidence of cervical lesions were the respondent's age, first experience of sexual intercourse (p 0.548), family planning methods (p 0.451) and genital hygiene (p 0.512). The factors that contributed to the incidence of cervical lesions were the number of sexual partners (p 0.164, OR 0.378), use of assistive devices (p 0.000, OR 8.634) and frequency of sex (p 0.000, OR 2.888)

**Conclusion:** The biggest contributor to these factors is the use of sexual aids

**Keywords:** Sexual, Cervical Lesions

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Received: March 28, 2022; Revised: September 22, 2022; Accepted: September 25, 2022

**Background:** Dysplastic lesions of the cervix are also known as "precancerous lesions" (Hayat, 2019), these cervical lesions are the initial occurrence of cervical cancer. Cervical cancer is a type of malignancy or neoplasm that occurs in the cervical area (cervix) and or the cervix, which is the lowest part of the uterus that protrudes to the top of the copulation hole. (Ehrlich, 2013).

Early changes in cervical cells do not cause symptoms. At the stage where the cells have become malignant, they cause symptoms, so that cervical cancer patients often come to health facilities already at the stage of malignancy. (Khasbiyah, 2014) (Oguntayo, 2012) Therefore, it is very important to hold an early detection before cancer occurs. Symptoms of cervical cancer in pre-cancerous conditions are indicated by the

discovery of abnormal cells at the bottom of the cervix which can be detected through a Pap Smear test, or which has recently been socialized, namely Visual Inspection with Acetic Acid (IVA). (Lee, J.-Y., Kim, E.-Y., Jung, K.-W., Shin, A., Chan, K. K. L., Aoki, 2014) ,(Wardak, 2016) IVA examination has been widely studied in China, India, Zimbabwe and FIGO (Cuzick, J., Stavola, D., McCance, D., Ho, T. H., Tan, G., Cheng, 2019) ,(The International Federation of Gynecology and Obstetrics) has approved IVA as a viable option for screening in facilities with low facilities.(DepKes.R.I., 2012),(Kemenkes, 2019),

It is estimated that the incidence of this disease is about 100 per 100,000 population. Every year no less than 15,000 cases of cervical cancer occur in Indonesia. That

makes cervical cancer referred to as the number 1 female killer disease in Indonesia. (Kementerian.KesehatanRI, 2017) Almost all (99.7%) cervical cancer is directly related to previous infections. One of them is Human Papilloma Virus infection. (Tierney, Westin, Schlumbrecht, & Ramirez, 2010) A woman infected with HPV can improve spontaneously or develop low-grade lesions (CIN I = Cervical Intraepithelial Neoplasm). If left unchecked within 10 years can develop into high-grade lesions that eventually become cervical cancer. (Oguntayo, 2012)

Host factors between immune status, where immunodeficiency patients infected with HPV more quickly regress into precancerous and cancerous lesions. (Ramogola-Masire, D., Klerk, R. d., Monare, B., Ratshaa, B., Friedman, H. M., & Zetola, 2012) The number of parities, where more parity is more at risk of developing cancer. (Ribeiro *et al.*, 2015) Another host factor is the age of starting sexual activity, the younger the chance to suffer from cervical cancer is 3.9 times greater. Likewise in his research that the first age to experience menstruation will be 2.92 times greater risk (Curry *et al.*, 2018)

Agent factors include the type of virus, infection with several types of oncogenic HPV simultaneously, the number of viruses. (Dietz and Nyberg, 2011) Other exogenous factors are co-infection with other sexually transmitted diseases, long-term use of hormonal contraceptives. (Cuzick, J., Stavola, D., McCance, D., Ho, T. H., Tan, G., Cheng, 2019)

**Methods.** This study uses an analytical survey. The population of this study were all women who had partners of childbearing age. Samples were taken using accidental sampling, namely patients who carried out VIA examinations at independent practice midwives in the Magelang Regency

**Result and Discussion.** In the crosstab between the dependent variable and the independent variable, the data obtained are as follows:

#### 1. Age

Table 1. Age crosstab with cervical lesion

|              | Age 20-45<br>year | Age <20<br>and >45year | Total |
|--------------|-------------------|------------------------|-------|
| IVA Negative | 78                | 0                      | 78    |
| IVA Positive | 18                | 0                      | 18    |
| Total        | 96                | 0                      | 96    |

The relationship test cannot be carried out because the number of respondents for the

category of less than 20 years and more than 45 years does not exist

#### 2. The first experience of sexual intercourse with the incidence of cervical lesions

Table 2. First age of sexual intercourse crosstab with cervical lesion incidence

|              | Age > 17<br>year | Age <<br>17year | Total |
|--------------|------------------|-----------------|-------|
| IVA Negative | 57               | 21              | 78    |
| IVA Positive | 15               | 3               | 18    |
| Total        | 72               | 24              | 96    |

Correlation test results obtained p value of 0.548

The results of the analysis of the crosstab test between the experience of sexual intercourse with the incidence of cervical lesions as shown in table 2. respondents who experienced the most cervical lesions were at the age of less than 17 years. Correlation test results obtained p value of 0.548

#### 3. Number of sexual partners with cervical lesions

Table 3. Table of sexual partners with cervical lesions

|              | 1<br>Partner | > 1<br>Partner | Total |
|--------------|--------------|----------------|-------|
| IVA Negative | 50           | 28             | 78    |
| IVA Positive | 15           | 3              | 18    |
| Total        | 65           | 31             | 96    |

Correlation test results obtained p value of 0.164

#### 2. Frequency of sex in 1 week with cervical lesions

Table 4. table of sex frequencies with cervical lesions

|              | 2-3 times per<br>week | > 3 times<br>per week | Total |
|--------------|-----------------------|-----------------------|-------|
| IVA Negative | 78                    | 0                     | 78    |
| IVA Positive | 11                    | 7                     | 18    |
| Total        | 89                    | 7                     | 96    |

#### 3. Multiple Regression Test

the results of the test of the relationship between the dependent variable and the independent variable, so to find out the greatest risk factor, logistic regression test was carried out. In this test, a variable with a p value below 0.25 is taken. The variables tested were the number of sexual partners, the use of sex aids and the frequency of sex in one week. The test showed that the number

of couples with an OR of 0.378, the use of assistive devices with an OR of 8.634 while the frequency of sex in one week with an OR of 2.888

The age of the respondents was divided into 2 groups where the first group was between the age range of 20 to 45 years while the second group was the age group of less than 20 years and more than 45 years. This variable could not be tested because in the second group there were no respondents.

The experience of first sexual intercourse which was differentiated according to age did not have a significant relationship with the incidence of cervical lesions, although there were several studies that found a relationship, this may be due to the different respondents. If you look at the age distribution of the respondents, in this study there is only one group.

The use of family planning methods in this study was not found to have a significant relationship. This study only distinguishes the use of hormonal and non-hormonal family planning, does not look further at how long the method is used, in some literature hormonal family planning will have an effect on the user after several periods of use.

Genital hygiene in this study also did not provide a significant relationship, this was possible because the age distribution of the respondents was only one group as well as the average age of the respondents was 32.8 years.

The variable that gives meaning to the relationship is the number of sexual partners ( $p = 0.164$ ) with an OR of 0.378 or in other words, people with more than 1 number of sexual partners are at risk of 0.378 times compared to people who do not use assistive devices, use sex aids ( $p = 0.000$ ) with OR 8,634 or it can be interpreted that couples who use sexual aids will be at risk of 8,634 times compared to couples who do not use assistive devices and the frequency of sex is calculated every week ( $p = 0.000$ ) with OR 2.888 or can be interpreted as people with sex frequency more than 4 times a week will be at risk of 2,888 times compared to couples who have sex less than 4 times a week

#### **Conclusion and Suggestions.**

Several factors were observed that gave the risk of cervical lesions between the number of partners having sexual intercourse, the use of assistive devices during sex and the

frequency of sexual intercourse in each week. The biggest contributor to these factors is the use of sexual aids. Variables that do not contribute to the incidence of cervical lesions include the respondent's age, use of family planning, genital hygiene and the experience of having sexual intercourse for the first time.

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