

# Influential Correlation Factor Of The Iva Test Result Towards The Woman Prisoners Of Ii A Class In Semarang

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**Abstract.** Cervix cancer is number one killing disease among women. Since 2008-2014, Central Java especially Semarang is the second highest prevalence of cervix cancer. Actually the early cervix cancer detection could be conducted through IVA test, because this sort of test is relatively fast and accurate in only one visit and treatment. Woman prisoners are groups of nondependent person and vulnerable in case of reproduction system. According to the observation, the excessive prisoners and lack of officers would limit health/medical access to its inhabitants. This study employed analytic correlation design by using 44 woman prisoners in prison of IIA class in Semarang. Besides the data was analyzed using SPSS for windows. The result of the study showed that 29.5% women were positively infected (by positive result of IVA test). In other hand, there were 52.3% women having sexual intercourse less than 20 years old, 65.9% women having sexual partner. Besides, 52.3% women experienced douching vagina, 59.1% women were multiparity obstetric, and 77.3% women did not have any cancer history in their family. Conclusion: There is relatively influential correlation between the age of first time having sexual intercourse, numbers of sexual partners, and obstetric history towards the result of IVA test.

## INTORODUCTION

Cervix cancer is the number one killing disease among women which also has the highest relative frequency of 25.6% in Indonesia (Bustan, 2007). According to the Jateng Profiles (2012) the prevalence of cervix cancer in Central Java during 2008 – 2012 was the number two higher after breast cancer, with the dissemination of 2,259 cases of cervix cancer (24.2%), 4,206 cases of breast cancer (45.02%), 2,755 cases of liver cancer, and 2,121 cases of lung cancer (22.7%).

The earlier detection of cervix cancer using IVA method has been developed since 2007, applying the standardized workshop that produce competent medical workers to implement earlier detection using IVA test. If someone's result of IVA test is positive if there exist pre-cancer lesions which actually can be cured by Kriotheraphy. In fact, by 2014 this test had been conducted in at least 19 Regencies/Municipalities especially for women aged 30-50 years old (Profile of Central Java Health Department, 2014). The percentage of positive IVA test and lumps taken from the examination in Hospitals were 3.83%. Generally, woman prisoners give the contribution by 5% of all the prisoners and has tendency of improving rapidly, especially in countries with high-level consumption of drugs. In 2005, it is the fact that more than half millions of prisoners were women and girls. Ironically, we can say that at least 1.5 million people will be imprisoned every year (UNODC, 2008).

## RESEARCH METHOD

This study employed analytic design with cross sectional approach. The population used in this study was 375 woman prisoners in LP Class IIA Semarang. The sampling was taken by 10-15% total population using random sampling. From that sampling, there existed 44 respondents in this study. This study conducted in March 2016. It also emphasized the etiquette of informed consent, confidentiality, anonymity and advantage as well. The data was also analyzed using chi square with the degree of trust of 95% ( $\alpha=0.05$ ). Writers used SPPS to analyze the data and conduct the statistic analysis. While the writer used questionnaire to measure dependent and independent variable.

## RESULT AND DISCUSSION

The characteristic of woman prisoners in LP Class II Semarang can be examined by age, education and duration of living in prison (LP). The average age of its inhabitant is 34 years old, with the youngest is 19 years old and the oldest is 51 years old. In other hand, most of people in the prison are 56.8% passed from Senior High School, 18.2% university graduated, 15.9% passed from Junior High School, 4.5% passed from Elementary School, and 4.5% uneducated. The duration of being imprisoned are also various, the shortest is 1 month and the longest is 48 months.

### IVA TEST RESULT

Table 1. The Distribution of IVA test Result of Woman Prisoners in LP Class II Semarang

Hasil IVA test	Frequency (n)	Percentage (%)
Positive	13	29,5
Negative	31	70,5
<b>Total</b>	<b>44</b>	<b>100</b>

Table 1 showed that majority of respondent (70.5%) were negative by IVA test and 29.5% respondents were positive. This also illustrated that there were a lot of influential factors in the result of IVA test. The variable that influence the result were the age of first sexual intercourse, numbers of sexual partners, obstetric history, sexual cancer history, and genital care (the use of genital soap).

### SEXUAL BEHAVIOR

Perilaku Seksual	Frequency (n)	Percentage (%)
Age of first sexual intercourse		
<20 years old	23	52,3
≥20 years	21	47,7
Partner Seksual		
Single Partner	29	65,9
Multipartner	15	34,1
<b>Total</b>	<b>44</b>	<b>100</b>

Table 2 showed that the average age of first sexual intercourse less than 20 years were 52.3%. Besides, 65.9% respondents owned one sexual partner while 34.1% were having sexual intercourse with more than one partners (multi sexual partners).

In identifying the distribution of IVA test based on the age of first sexual intercourse and numbers of sexual partners, it could be translated into this following table:

Table 3. The Distribution of IVA test result based on the Age of First Sexual Intercourse and Sexual Partners of Woman Prisoners in LP Class II Semarang

Age of first sexual intercourse	IVA Test result			
	Positive		Negative	
	Amount	%	Amount	%
<20 years	10	43,5	13	56,5
≥20 years	3	14,3	18	85,7
<i>p value = 0,034</i>				
Singlepartner	4	13,8	25	86,2
Multipartner	9	60	6	40
<i>P value = 0,001</i>				

Table 3 showed that 43.5% of women having their first sexual intercourse at the age of less than 20 years old and 60% of multi partners women were IVA test positive. IVA test negative found in those who have their first sexual intercourse at the age of more than 20 years old (85.7%) and own one partner only (86.2%). The data then, were analyzed using statistic test with the significant degree of 5% on the age of first sexual intercourse and the IVA test

result ( $p < 0.05$ ). This illustrated that there was correlation between the age of first sexual intercourse of woman prisoners in LP Class II Semarang and IVA test result.

## VAGINAL DOUCHING BEHAVIOUR

Table 4. the distribution of Vagina Douching Behaviour of Woman Prisoners in LP Class II Semarang

<b>Pencucian Vagina</b>	<b>Frekuensi (n)</b>	<b>Persentase (%)</b>
Melakukan <i>douching</i> vagina	23	52,3
Tidak melakukan <i>douching</i> vagina	21	47,7
<b>Total</b>	<b>44</b>	<b>100</b>

Tabel 4 showed that 52.3% woman prisoners experienced vaginal douching. The media used for applying vaginal douching could be observed by this following:

Table 5. The distribution of Vaginal Douching of woman prisoners in LP Class IIA Semarang

<b>Media Pencucian Vagina</b>	<b>Frekuensi (n)</b>	<b>Persentase (%)</b>
Sabun khusus kewanitaan	4	17,4
Sabun sirih	10	43,5
Betadine /albothyl	3	13
Sabun mandi	4	17,4
Pasta gigi	2	8,7
<b>Total</b>	<b>23</b>	<b>100</b>

Table 5 showed that most respondent apply traditional woman soap for vaginal douching (43.5%), 17.4% women applied vaginal cleanser product, 17.4% women used body soap, 13% women used betadine/albothyl, and 8.7% women used toothpaste for washing their genital area.

Table below is illustrated to identify the IVA test result based on vaginal douching behavior:

Table 6. The distribution of IVA test result based on vaginal douching behavior of women prisoners in LP Class II Semarang

<b>Perilaku Pencucian Vagina</b>	<b>Hasil IVA test</b>			
	<b>Positif</b>		<b>Negatif</b>	
	<b>Jumlah</b>	<b>%</b>	<b>Jumlah</b>	<b>%</b>
Melakukan	5	21,7	18	78,3
Tidak melakukan	8	38,1	13	61,9

$p \text{ value} = 0,235$

The result showed that IVA test positive in respondents who applying vaginal douching as much 21.7% while women who regularly do the vaginal douching (78.3%) found that their IVA test negative. Statistic test with significant level of 5% on the vaginal douching behavior and IVA test were 0.235 ( $p > 0.05$ ). This depicted that there is no significant correlation between vaginal douching behavior and IVA test result of woman prisoners in LP Class II Semarang.

## OBSTETRIC HISTORY

Table 7. the distribution of Obstetric history of woman prisoners in LP Class II Semarang

<b>Riwayat Obstetri</b>	<b>Frekuensi (n)</b>	<b>Persentase (%)</b>
Primiparitas	18	40,9
Multiparitas	26	59,1
<b>Total</b>	<b>44</b>	<b>100</b>

Table 7 showed that 59.1% respondents owned multi parity history, with the average 2 delivery times. It was started by women who never deliver a baby to those who experienced up to 5 delivery times.

This following table would identify the distribution of IVA test result based on obstetric history of woman prisoners in Class II Semarang:

Table 8 The distribution of IVA test result based on obstetric history of woman prisoners in class II Semarang

Riwayat Obstetri	Hasil IVA test			
	Positif		Negatif	
	Jumlah	%	Jumlah	%
Primiparitas	2	11,1	16	88,9
Multiparitas	11	42,3	15	57,7
<i>p value = 0,026</i>				

The percentage of IVA test positive found mostly in women who experienced multi parity obstetric (42.3%), while IVA test negative found in women who experienced prim parity (88.9%). The score of p 0.026 showed that there was significant correlation between obstetric histories of woman prisoners.

## Cancer History in Family

Table 9. The distribution of Cancer History in Family of Woman Prisoners in LP Class II Semarang

Riwayat Kanker dalam Keluarga	Frekuensi (n)	Persentase (%)
Mempunyai riwayat	10	22,7
Tidak mempunyai riwayat	34	77,3
<b>Total</b>	<b>44</b>	<b>100</b>

Table 9 showed that 77.3% respondent have no cancer history in their family. Whereas, the average history of those who own cancer history was 11.4% cervix cancer, 4.5% breast cancer, 6.8% another cancer (mioma, brain cancer, lung cancer). While to identify the distribution of IVA test based on the obstetric, it could be described by this following table:

Table 10 The distribution of IVA test result based on the Cancer History in Family of woman prisoners in LP Class II Semarang

Jumlah Partner Seksual	Hasil IVA test			
	Positif		Negatif	
	Jumlah	%	Jumlah	%
Mempunyai riwayat	3	30	7	70
Tidak mempunyai riwayat	10	29,4	24	70,6
<i>p value = 0,971</i>				

IVA test positive in 30% respondents who have the history of cervix cancer in their family, while IVA test negative found in 70.6% respondents who do not have the history of cancer in their family. Score of p 0.971 depicted that there was no significant correlation between cancer history in the family and IVA test.

## CONCLUSION

1. 70.5% respondent were IVA test negative, 52.3% women less than 20 years old have already had their first sexual intercourse, 65.9% women owned more than one sexual partners, 52.3% women applied vaginal douching, 59.1% women were multi parity, and 77,3% women did not have the cancer history in their family.
2. There was significant correlation between age of first sexual intercourse, numbers of sexual partners and IVA test.

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