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Factors Influencing the Level of Knowledge of Reproductive Age Women about Visual Inspection with Acetic Acid (VIA Test) at PMB S. April - May Period in 2023

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Abstract

Background: Cervical cancer is a disease caused by sexually acquired infection with Human Papiloma Virus (HPV) sub-types, especially sub-types 16 and 18 (WHO, 2016). IVA is an examination of the cervix (cervix) by looking directly (naked) at the cervix after wiping the cervix with a 3-5% acetic acid solution. Based on data from the Indonesian cancer foundation, in Indonesia 1 hour 1 person dies from cervical cancer and 34.4 per cent of cancers in women. The number of new cases of cervical cancer is 40 to 45 per day.
Purpose: To find out what factors influence the level of knowledge of WUS on knowledge about VIA test in PMB S period April-May 2023?
Methods: The design used was a survey with a "Cross Sectional" approach, namely research on several populations observed at the same time, The population taken in this study were all Women of Fertile Age (WUS) who conducted family planning at PMB S on 18 April - 08 May Tangerang Banten Year 2023
Results: Based on statistical tests, it was found that there was no significant relationship between age and the level of knowledge of women of childbearing age about visual inspection of acetic acid (VIA) test where the p value = 0.171 (p> 0.050), there was no significant relationship between education and the level of knowledge of women of childbearing age about visual inspection of acetic acid (VIA) where the p value = 0.196 (p> 0.050), it was found that there was no significant relationship between education and the level of knowledge of women of childbearing age about visual inspection of acetic acid (VIA) where the p value = 0.196 (p> 0.050).0.050), it was found that there was a significant relationship between work and the level of knowledge of women of childbearing age about visual inspection of acetic acid (VIA) test at PMB Siti Rahayu Kreo Tangerang Banten in 2023where the p value = 0.012 (p> 0.050).
Conclusion: There is no significant relationship between the level of knowledge of WUS and work, level of knowledge, age of WUS about visual inspection of acetic acid (VIA).

Keywords: Cervical cancer, IVA test, WUS.

Introduction

Cervical cancer is a disease caused by sexually acquired infection with Human Papiloma Virus (HPV) subtypes, especially subtypes 16 and 18.[1] Cervical cancer is the

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4th most common cancer in women. In 2018, an estimated 570,000 women were diagnosed with cervical cancer worldwide and approximately 311,000 women died from the disease. Persistent infection with high-risk human papillomavirus (HPV) types is the main cause of cervical cancer.[2]

Based on data from the Indonesian Cancer Foundation, in Indonesia 1 hour 1 person dies worldwide because of cervical cancer and 34.4 per cent of cancers in women. The number of new cases of cervical cancer is 40 to 45 per day. While the death rate is 20 to 25 per day. The number of cervical cancer cases in Indonesia reported in 2016 reached 348,809 cases.

Meanwhile, according to the Global Cancer Observatory report in 2018, it is estimated that there are 32,469 cases per year ofcervical cancer in Indonesia, with a death rate of 18,279 people. In 2019, cervical cancerpatients in Indonesia increased, amounting to 21 thousand new cases each year. Human Papilloma Virus (HPV) as the cause of cervical cancer has claimed 21,003 lives, and there are 36,633 new cases against women. This means that 50 women in Indonesia die every day, and this makes cervical cancer the second in line in Indonesia.[3] In Banten Province in 2016, the number of women of childbearing age who had early detection of cervical cancer and breast cancer reported was 11,302. This percentage of WUS is still very far from the target set at 10%.

From11,302 women who underwent VIA test were found to be positive in 11,302 women or 0.65 per cent, this figure is lower than that set by the Ministry of Health, which is 3 per cent. South Tangerang City is the district/city with the highest percentage of positive VIA at 12.20 per cent, the high percentage of positive VIA indicates a high-risk factor for cervical cancer in the region.

Based on preliminary studies conducted by Sakinah 2017 in the Working Area of Puskesmas Kampung Bali Pontianak City, in 10 women of childbearing age, 6 women of childbearing age did not know about VIA (60%) and 4 (40%) fertile women knew about VIA. From the data above, it shows the lack of knowledge of WUS in the UPT Kesmas Payang area in the Kampung Puskesmas Working Area.

Method

1. Research design

The research method is the method that will be used in research. The research

method used is descriptive research method, namely a study conducted to describe or describe phenomena that occur in society. The design used in this study is a survey with a "CrossSectional" approach, namely research on several populations observed at the same time.

2. Settings and samples

This research was conducted on 18 April - 08 May at PMB S Year 2023. The populationtaken in this study were all Women of Fertile Age (WUS) who took family planning at PMB S. In this study the sampling technique used was accidental sampling technique. Accidental Sampling is a sampling technique based on chance, that is, consumers who accidentally / incidentally meet the researcher can be used as a sample, if it is considered that the person who happened to be met is suitable as a data source.[4] So that in the sampling technique here the researcher took respondents of women of childbearing age who were taking family planning and were married, at that time also at PMB S as many as 30 respondents.

Result

Table 1.
Frequency distribution of knowledge level of women of childbearing age about VIA test at PMB S from April to May 2023

No.	Knowledge	Frequency(N)	Presentation(%)
1	Good (76-100%)	13	43.3
2	Fair (56-75%)	10	33.3
3	Less (40-55%)	7	23.3
	Total	30	100.0

Table 1 above shows that out of 30 women of childbearing age, the majority had good knowledge as many as 13 respondents (43.3%), and the minority had poor knowledge asmany as 7 respondents (23.3%).

Table 2.
Frequency distribution of knowledge Level of knowledge of women of childbearing age about VIA test based on age at PMB S April - May period in 2023

No	Age	Frequency(N)	Presentation (%)
1	Young reproduction (15-19)	3	10.0
2	Healthy reproduction (20-35)	18	60.0
3	Old reproduction (36-45)	9	30.0
	Total	30	100.0

Table 2 above shows that of the 30 women of childbearing age, the majority were reproductively healthy (20-35) as many as 18 respondents (60.0%), and the minority were aged (15-19 years) as many as 3 respondents (10.0%)

Table 3.

Frequency distribution of knowledge of women of childbearing age about VIA test based on education at PMB S from April to May 2023

No	Education	Frequency	Presentation
1	Higher (College)	8	26.7%
2	Secondary (Senior High School)	15	50.0%
3	Low (Elementary-Middle School)	7	23.3%
	Total	30	100.0%

Table 3 above shows that out of 30 women of childbearing age, the majority are those with secondary education (SMA), namely 15 respondents (50.0%), and the minoritywith low education (SD, SMP), namely 7 respondents (23.3%).

Table 4.

Frequency distribution of knowledge of women of childbearing age about VIAtest based on occupation at PMB S from April to May 2023

No	Jobs	Frequency(N)	Presentation(%)
1	Work	14	46.7%
2	Not working	16	53.3%
	Total	30	100.0%

Table 4 above shows that out of 30 women of childbearing age, the majority are not working, namely 16 respondents (53.3%), and the minority are working as many as 14 respondents (46.7%).

Table 5.

Frequency distribution of knowledge of women of childbearing age about VIA test basedon parity at PMB S from April to May 2023

No	Parity	Frequency(N)	Presentation (%)
1	Primiparous	20	66.7
2	Multiparous	9	30.0
3	Grandemultipara	1	3.3
	Total	30	100.0

Table 5 above shows that of the 30 women of childbearing age, the majority were primiparous, namely 20 respondents (66.7%), and the minority were grandemultiparous as many as 1 respondent (3.3).

Table 6.
Relationship between Age and Knowledge of WUS about VIA Test in PMB SPeriod April - May Year 2023

No.	Age	Knowledge						Total		P-value
		Good (76-100%)		Fair (56-75%)		Less (40-55%)				
1	Reproduction young (15-19)Years	0	0.0%	2	6.7%	1	3.3%	3	10.0%	0.171
2	Healthy reproduction (20-35) Years	11	36.7%	4	13.3%	3	10.0%	18	60.0%	
3	Reproduction Older (36-45) Years	2	6.7%	4	13.3%	3	10.0%	9	30.0%	
	Total	13	43.3%	10	33.3%	7	23.3%	30	100.0%	

Based on Table 6, it can be said that out of 30 respondents, the majority of healthy reproductive respondents (20-35 years) as many as 11 people (36.7%) have good knowledge, 4 people (13.3%) have sufficient knowledge, 3 people (10.0%) have less knowledge and the minority of young reproductive respondents (15-19 years) as many as 2 people (6.7%) have less knowledge, no young reproductive respondents (15-19) have good knowledge, and 1 person (3.3%) has less knowledge. Based on the data above, it

can be said that the percentage of good knowledge level in the WUS group tends to be higher in the group of respondents who are of healthy reproductive age (20- 35 years). From the results of statistical tests obtained p value = 0.171 (p> 0.050), it can be concluded that there is no significant relationship between age and the level of knowledge of WUS.

Table 7.

The relationship between education and knowledge of women of childbearing ageabout VIA tests at PMB S during April - May 2023

No.	Education	Knowledge						Total		P-value
		Good (76-100%)		Fair (56-75%)		Less (40-55%)				
1	High (PT)	6	20.0%	1	3.3%	1	3.3%	8	26.7%	0.196
2	Secondary(SMA)	6	20.0%	5	16.7%	4	13.3%	15	50.0%	
3	Low (Elementary-MiddleSchool)	1	3.3%	4	13.3%	2	6.7%	7	23.3%	
Total		13	43.3%	10	33.3%	7	23.3%	30	100.0%	

Based on Table 7, it can be said that out of 30 respondents, the majority of respondents have secondary education (SMA), 6 people (20.0%) have good knowledge, 5 people (16.7%) have sufficient knowledge, 4 people (13.3%) have insufficient knowledge and the minority of respondents have low education (SD-SMP), 1 person (3.3%) has good knowledge, 4 people (13.3%) have sufficient knowledge, and 2 people (2.7%) have insufficient knowledge. Based on the data above, it can be said that the percentage of good knowledge levels in the WUS group tends to be higher among respondents with secondary education (SMA). From the results of statistical tests obtained p value = 0.196 (p> 0.050), it can be concluded that there is no significant relationship between occupation and the level of knowledge of WUS.

Table 8.

The relationship between occupation and knowledge of women of childbearingage about VIA tests at PMB S during April - May 2023

No.	Jobs	Knowledge						Total		P-value
		Good (76-100%)		Fair (56-75%)		Less (40-55%)				
1	Work	10	33.3%	3	10.0%	1	3.3%	14	46.0%	0.012
2	Not Working	3	10.0%	7	23.3%	6	20.0%	16	53.3%	
Total		13	43.3%	10	33.3%	7	23.3%	30	100.0%	

Based on Table 8, it can be said that out of 30 respondents, the majority of respondents worked as many as 10 people (33.3%) had good knowledge, 3 people (10.0%) had sufficient knowledge, 1 person (3.3%) had less knowledge and the minority of respondents did not work, as many as 3 people (10.0%) had good knowledge, 7 people (23.3%) had sufficient knowledge, and 6 people (20.0%) had less knowledge. Based on the data above, it can be said that the percentage of good knowledge levels in the WUS group tends to be higher among respondents who do not work. From the results of statistical tests obtained p value = 0.012 (p> 0.050), it can be concluded that there is a significant relationship between work and the level of knowledge of WUS.

Table 9.

The relationship between parity and knowledge of women of childbearing age aboutVIA tests at PMB S during April - May 2023

No.	Parity	Knowledge						Total		P-value
		Good (76-100%)		Fair (56-75%)		Less (40-55%)				
1	Primiparous	10	33.3%	6	20.0%	4	13.3%	20	66.7%	0.564
2	Multiparous	3	10.0%	3	10.0%	3	10.0%	9	30.0%	
3	Grandemultipara	0	0.0%	1	3.3%	0	0.0%	1	3.3%	
Total		13	43.3%	10	33.3%	7	23.3%	30	100.0 %	

Based on Table 9, it can be said that of the 30 respondents, the majority of primipara parity respondents as many as 10 people (50.0%) were well informed, 6 people (20.0%) were moderately knowledgeable, 4 people (13.3%) were less knowledgeable and

the minority of grandemultipara parity respondents as many as 1 person (3.3%) were moderately knowledgeable, there were no grandemultipara parity respondents with good and poor knowledge. Based on the data above, it can be said that the percentage of good knowledge levels in the WUS group tends to be higher in the Multiparous respondent group. From the results of statistical tests obtained p value = 0.564 (p> 0.050), it can be concluded that there is no significant relationship between parity and the level of knowledge of WUS.

Discussion

1. Relationship between age and level of knowledge of WUS about VIA testing

Age is the age of the individual calculated from the time of birth to repeated years. In accordance with the theory that states that the more age, the level of maturity and strength of a person will be more mature in thinking and working, this is as a result of experience and maturity of his soul, the older a person is, the more conducive he is to using coping with problems faced.[6]

The female reproductive period is divided into 3 periods, namely: Young reproduction (15-19 years) is the stage of delaying pregnancy, healthy reproduction (20-35 years) is the stage of spacing pregnancies, and old reproduction (36-45 years) is the stage of ending pregnancy.[5]

In this study of 30 respondents, the majority of healthy reproductive respondents (20-35 years) as many as 11 people (36.7%) had good knowledge, 4 people (13.3%) had sufficient knowledge, 3 people (10.0%) had insufficient knowledge and the minority of young reproductive respondents (15-19 years) as many as 2 people (6.7%) had insufficient knowledge, no young reproductive respondents (15-19) had good knowledge, and 1 person (3.3%) had insufficient knowledge. Based on the data above, it can be said that the percentage of good knowledge level in the WUS group tends to be higher in the group of respondents who are of healthy reproductive age (20-35 years). From the results of statistical tests obtained p value = 0.171 (p> 0.050), it can be concluded that there is no significant relationship between age and the level of knowledge of WUS.

This is not in line with the theory that states if age is related to the knowledge of women of childbearing age about the VIA test, then the older the age, the more

experience the woman of childbearing age has, the more information the woman of childbearing age gets and the more she understands what the use of the VIAtest is for health in an effort to prevent early cervical cancer.[4]

This is also in line with Gina's research (2019) which shows that of the 30 respondents who had a good level of knowledge about the VIA test, the majority were in the 20-35year age group, namely 7 respondents (43.8%) who had good knowledge, 7 respondents (43.8%) who had sufficient knowledge and 2 respondents (12.5%) who had poor knowledge. And the minority is in the age group 15-19 years, namely as many as 1 respondent (50.0%) who is knowledgeable, as many as 1 respondent (50.0%) who is knowledgeable enough and there are no respondents who are knowledgeable less.[7] Based on the data above, it can be said that the percentage of good knowledge levels in the WUS group tends to be higher owned by the WUS group.

The group of respondents who were reproductively healthy (20-35 years old). From the results of statistical tests obtained p value = 0.453 (p> 0.050), it can be concluded that there is no significant relationship between age and the level of knowledge of WUS.

With this, the author assumes that the results of the study are different from the theoretical basis which states that the higher a person's age, the more experience and knowledge. This can happen because to increase a person's knowledge, in addition to age, it turns out that it is also influenced by several other factors as well, such as education level, occupation and exposure to mass media both print and electronic, various information can be received by mothers, so that mothers who are more often exposed to mass media will get more information and affect the level of knowledge they have.[4]

2. The relationship between occupation and the level of knowledge of WUS about VIA tests

Work is a daily activity carried out by respondents in producing material in the form of money. Work is a necessity that must be done mainly to support their lives and family life. People who are busy with daily activities or work will have less time to obtain information.[5]

In this study, out of 30 respondents, the majority of respondents worked as many as 10 people (33.3%) with good knowledge, 3 people (10.0%) with sufficient knowledge, 1 person (3.3%) with less knowledge and the minority of respondents did not work, as

many as 3 people (10.0%) with good knowledge, 7 people (23.3%) with sufficient knowledge, and 6 people (20.0%) with less knowledge. Based on the data above, it can be said that the percentage of good knowledge levels in the WUS group tends to be higher among respondents who do not work. From the results of statistical tests obtained p value = 0.012 (p> 0.050), it can be concluded that there is a significant relationship between work and the level of knowledge of WUS.

This is in line with the theory that work is generally a time-consuming activity andcan provide experience and knowledge both directly and indirectly.[4] This is not in line with Gina's research (2019) which shows that of the 30 respondents who had a good level of knowledge about the VIA test, the highest number of respondents in the non-working group were 13 respondents (50.0%) who had sufficient knowledge, as many as 8 respondents (30.8%) who had good knowledge and 5 respondents (19.0%) who had poor knowledge. And the minority is in the working group, namely as many as 2 respondents (50.0%) who are well informed, as many as 1 respondent (25.0%) who are moderately knowledgeable and as many as 1 respondent (25.0%) who are less knowledgeable.Based on the data above, it can be said that the percentage of good knowledge levels in the WUS group tends to be higher for respondents who do not work. From the statistical test resultsobtained p value= 0.636 (p > 0.050), it can be concluded that there is no significant relationship between occupation and the level of knowledge of WUS.[7]

The author assumes that work can affect a person's knowledge because a person who works can get information from electronic media, people around, and from health workers. The work environment can shape knowledge because of the exchange of information between friends in the work environment.[8]

3. The relationship between education and the level of knowledge of WUS about VIA testing

Education is a formal education that a person has successfully passed which is legitimised by a diploma. Formal and non-formal education can have an immediate impact, resulting in a change or increase in knowledge. [4]

In this study the majority of respondents had secondary education (SMA) as many as 6 people (20.0%) had good knowledge, 5 people (16.7%) had sufficient knowledge, 4 people (13.3%) had less knowledge and the minority of respondents had low education (SD-SMP), as many as 1 person (3.3%) had good knowledge, 4 people (13.3%) were

moderately knowledgeable, and 2 people (2.7%) were knowledgeable less.

Based on the data above, it can be said that the percentage of good knowledge levels in the WUS group tends to be higher among respondents with secondary education (SMA). From the results of statistical tests obtained p value=0.196 (p> 0.050), it can be concluded that there is no significant relationship between occupation and the level of knowledge of WUS.

This is not in line with the theory that states education is guidance given by someone to others so that they can understand something. It is undeniable that the higher a person's education, the easier it is for them to obtain information, and in the end the more knowledge they have. Education is needed to get information such as things that support health so that it can improve the quality of life. Education can affect a person, including a person's behaviour, especially in motivating attitudes towards development. The higher the education, the easier itis to receive information.[8]

This is also not in accordance with the theory that the higher a person's education, it is expected that it will increase the ability to develop self-potential, the higher the education, the human life will produce good knowledge that makes a quality life. [4]

This is in line with Gina's research (2019) which shows that of the 30 respondents who had a good level of knowledge about the VIA test, the highest number of respondents in the secondary education group (SMA) were 7 respondents (31.8%) who were well informed, 9 respondents (40.9%) who were moderately informed and 6 respondents (27.3%) who were less informed. And the minority is in theless educated group (SD-SMP), namely 1 respondent (33.3%) who is well informed, as many as 2 respondents (66.7%) who are moderately knowledgeable and no respondents who are less knowledgeable. Based on the data above, it can be said that the percentage of good knowledge levels in the WUS group tends to be higher among respondents with secondary education (SMA). From the results of statistical tests obtained p value = 0.580 (p> 0.050), it can be concluded that there is no significant relationship between occupation and the level of knowledgeof WUS.[7]

The author assumes that a person's formal education is not the main factor affecting the level of knowledge of an individual because information can be obtained from various sources, especially technology which is very rapidly developing in the

modernisation era. Sources of information can be obtainedfreely ranging from peers, books, films, videos, and even easily open sites via the internet so that even WUS who are not highly educated can get information easily,therefore their level of knowledge is good.[9]

4. The relationship between parity and the level of knowledge of WUS about VIA test examination

Parity is the number of live births a woman has had.[10] Parity is when a woman has given birth to a baby with a gestation period between 38 and 42 weeks.[11] In this study the majority of primipara parity respondents as many as 10 people (50.0%) had good knowledge, 6 people (20.0%) had sufficient knowledge, 4 people (13.3%) had less knowledge and the minority of grandemultipara parity respondents as many as 1 person (3.3%) had sufficient knowledge, there were no grandemultipara parity respondents with good and less knowledge. Based on the data above, it can be said that the percentage of good knowledge levels in the WUS group tends to be higher in the Multiparous respondent group. From the results of statistical tests obtained p value = 0.564 (p> 0.050), it can be concluded that there is no significant relationship between parity and the level of knowledge of WUS.

This is not in accordance with the theory of Notoatmodjo (2016), namely knowledge is closely related to parity because more personal experience is obtained and can lead a person to draw conclusions. This is not in line with Gina's research (2019) which shows that of the 30 respondents who had a good level of knowledge about the VIA test, the highest number of respondents in the multiparous parity group were 6 respondents (27.3%) who were well informed, 11 respondents (50.0%) who were moderately informed and 5 respondents (22.7%) who were less knowledgeable. And the minority is in the grandemultiparous parity group, 1 respondent (50.0%) had good knowledge, 1 respondent (50.0%) had sufficient knowledge and no respondents had poor knowledge. Based on the data above, it can be said that the percentage of good knowledge levels in the WUS group tends to be higher in the Multiparous respondent group. From the results of statistical tests obtained p value = 0.789 (p> 0.050), it can be concluded that there is no significant relationship between parity and the level of knowledge of WUS.

The author assumes that parity is not the main factor influencing a person's

levelof knowledge, because knowledge can be obtained from various sources, especially technology which is very rapidly developing in the era of modernisation. Sources of information can be obtained freely from peers, books, films, videos, and even easily open sites via the internet.[12]

Conclusions

Based on statistical tests, it can be concluded that there was no significant relationship between age and education with the level of knowledge of women of childbearing age about visual inspection of acetic acid (VIA). There was a significant relationship between working status, and the level of knowledge of women of childbearing age about visual inspection of acetic acid (VIA) test at PMB Siti Rahayu Kreo Tangerang Banten in 2023.

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