

Correlation between knowledge level and mother's motivation to do pap smear screening

Nuristy Brilliant Ainindyahsari Winarna^{1*}, Suratini², Luluk Rosida³

^{1,2,3} Aisyiyah Yogyakarta University, Indonesia

Email: ¹nuristybrilliant02@gmail.com*; ²suratini@unisayogya.ac.id ³rosidalulu@gmail.com

*Corresponding Author: Nuristy Brilliant Ainindyahsari Winarna

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Abstract

The low level of Pap smear screening is influenced by low knowledge. The purpose of this study was to analyze the correlation between the level of knowledge and the mother's motivation to perform a pap smear examination. This research used the Correlational Analytical method with the Cross-Sectional approach. The study population was all women of childbearing age living in Kricak village, RW 06, Kricak, Tegalrejo, Yogyakarta, totaling 49 women. Samples were taken based on the total sampling technique. Data analysis was performed with Kendall's Tau. The results revealed that as many as 12.2% of women of childbearing age (WUS) had good knowledge, 26.5% had sufficient knowledge and 61.2% had poor knowledge. In terms of motivation, as many as 28 respondents (57.1%) or most of the sample, have motivation in the category of poor with poor knowledge. The significance value obtained was 0.001 with a correlation value of 0.591. This finding suggests that there is a correlation between knowledge and a mother's motivation to perform a Pap smear screening where the correlation is in the medium range of closeness. The Tegalrejo Yogyakarta Health Center is expected to educate people about the dangers of cervical cancer and the importance of getting a pap smear exam.

Keywords: knowledge; cervical cancer; motivation

INTRODUCTION

Reproductive health still requires health services to address women's needs or problems. Women's reproductive health issues frequently include increased infections in the reproductive organs, with cervical cancer being the second leading cause of death (MS & Ridjal, 2017). Because some women are unaware of the risks and causes of cervical cancer, nearly every woman diagnosed with the disease seeks medical attention at an advanced stage (Setyatama et al., 2015; Ulfiana, 2013). Cervical cancer problems should be detected early with several initial examinations that have been widely carried out through education, and counseling, one of which is the use of the Pap smear (Sari, 2017). Many women in Indonesia lack information about cervical cancer, one of which is due to women's lack of understanding about pap screenings. A person's lack of understanding will influence motivation to perform tasks such as pap smear exams. The findings of this study are consistent with the findings of a study conducted by Witari & Yulindari, (2016), which states that there is a correlation between motivation and attitudes of couples of childbearing age toward the use of pap smear services, with the majority of respondents, or 23 (57.5 %), having a low motivation and 21 (52.5 %) having a negative attitude. This



is more common in elderly women. Various causes are the triggers where more than half of women with cervical cancer have not had a Pap smear in at least the last 3 years, even though health care facilities have provided it. This causes the maternal mortality rate with cervical cancer to increase (Rosidah & Ningrum, 2017; Siagian, 2015).

According to the World Health Organization (WHO), cervical cancer is the most common cancer and ranks fourth in women with an estimated 530,000 new cases in 2012 representing 7.9% of all cancers in women. In 2015, low- and middle-income nations accounted for 90 % of cervical cancer mortality, or 270,000 cases. According to Globocan, International Agency for Research on Cancer (IARC) estimates from 2012, the incidence of cancer in Indonesia is 134 per 100,000 population, with the highest incidence in women in the form of breast cancer cases, which is 40 per 100,000, followed by cervical cancer, which is 17 per 100,000. Colorectal cancer occurs with an incidence of 10 per 100,000 women. Cervical cancer had the greatest prevalence in Indonesia in 2013, with a rate of 0,08 %. The anticipated number of cervical cancer cases, in this case, is 98,692 cases. Based on routine data carried out by the Cancer Sub-Directorate of the Directorate of Non-Communicable Diseases, the Indonesian Ministry of Health, the cervical cancer early detection program until 2017 has been held by 1,986 health centers from 34 provinces in Indonesia for 3,040,116 WUS (Kementrian Kesehatan RI, 2018).

Currently, the scope of "screening" for early detection of cervical cancer in Indonesia through pap smears and IVA is still very low (around 5%), whereas the coverage of "screening" is effective in reducing morbidity and mortality due to cervical cancer is 85%. The Indonesian Cancer Foundation said that the early detection of cervical cancer through GNPCKS from 2012 to the end of March 2013 resulted in an increase in coverage of 35,859 consisting of 33,043 pap smear examinations and 2,816 IVA (Kementrian Kesehatan RI, 2015). The lack of desire of women of childbearing age to undergo a pap smear examination is caused by several factors, including a lack of knowledge. It can also be caused by the fact that there are still many who do not have the awareness to undergo a pap smear examination, for example, due to fear, shame, limited financial resources, and do not feel the need, so that they have a poor motivation to get a pap smear examination (Rosidah & Ningrum, 2017; Suarniti, 2017). Other problems include a lack of cross-sectoral coordination and inadequate facilities in various health services, where patient recovery is dependent on early detection and successful treatment (Oktavyany *et al.*, 2015).

This finding is consistent with previous research (Sari, 2017) that found a significant correlation between the motivation for early detection of cervical cancer and the act of performing pap smears on women of childbearing age, which was influenced by many factors, one of which was the respondent's lack of knowledge. The greater a person's knowledge, the more rational a response and the greater the awareness to participate in the prevention of serious diseases such as cervical cancer through Pap smear screening (Hartati *et al.*, 2016). As a result, the researcher wished to investigate the effect of a person's level of knowledge on motivation to perform a pap smear examination. Based on the information above, the researcher is interested in researching "The Correlation of Knowledge Level with the motivation for pap smear examination at the Tegalgrejo Health Center Yogyakarta in 2018".

RESEARCH METHODS

The method used in this research was quantitative research with correlation analysis. The population in this study were women of childbearing age-aged 35-60 years who were in the working area of the Tegalrejo Health Center Yogyakarta, Kricak Village, RW 06, amounting to 49 people. The number of samples in this study was 49 WUS. Sampling was done cross-sectional using the total sampling technique. The research was conducted in October - July 2018 in Kricak Village, RW 6 Tegalrejo Yogyakarta. The independent variable in this study is knowledge, while the dependent variable is the motivation of the Pap Smear. The researcher created a questionnaire based on theory as the data collection instrument. A questionnaire was used by the researcher to collect data, which was then used to determine the score. The acquired data was then tabulated into a data collection matrix previously developed by the researcher for further data analysis. The "Product Moment Person" correlation was utilized as the validity test in SPSS Software. Kendall's Tau test ($p \leq 0,05$) was used to analyze the data.

RESULTS AND DISCUSSION

This study was carried out in Kricak Village, Tegalrejo Sub District, Yogyakarta City, Yogyakarta Province's Special Region. The criteria of respondents in the study will influence the study's conclusions, hence it is critical to be properly structured.

A. Respondent Criteria

Table 1. Respondents Based on Age, Education, and Occupation Categories in RW 06 Kricak Village, Tegalrejo, Yogyakarta

No	Respondents' Characteristics	Frequency	Percentage (%)
1.	Age		
	<35	10	20.4
	35-47	21	42.9
	48-60	18	36.7
	Total	49	100
2.	Educational Level		
	Elementary School	11	22.4
	Junior High School	19	38.8
	Senior High School	11	22.4
	College	8	16.8
	Total	49	100
3.	Job Status		
	Employed	19	38.8
	Unemployed	30	61.2
	Total	49	49

Source: Primary Data, 2018

Table 1 shows that based on age, most of the respondents or 21 respondents (42.9%) are 35-47 years old, while at least 10 respondents (20.4%) are <35 years old. In terms of education level, most of the respondents, or as many as 19 people (38.8%) are junior high school graduates and only 8 respondents (16.8%) are university graduates. The majority of responders, or 30 respondents (61.2 %), are not working women, whereas 19 respondents (38.8%) are working women.

B. Univariate Analysis

Table 2. Knowledge of WUS in RW 06 Kricak Village, Tegalrejo Yogyakarta 2018

No	Knowledge	Frequency	Percentage
1	Good	6	12.2
2	Fair	13	26.5
3	Porr	30	61.2
	Total	49	100

Source: Primary Data 2018

Table 2 shows that WUS knowledge related to pap smears in RW 06 Kelurahan Kricak, Tegalrejo Yogyakarta, mostly or as many as 30 respondents belongs to the poor category (61.2%), while the good category is only owned by 6 respondents (12.2%).

Table 3. Motivation of WUS in RW 06 Kricak Village, Tegalrejo Yogyakarta 2018

No	Motivation	Frequency	Percentage
1	Good	6	12.2
2	Fair	15	30.6
3	Por	28	57.1
	Total	49	100

Source: Primary Data 2018

Table 3 shows that the motivation for WUS in RW 06 Kelurahan Kricak, Tegalrejo Yogyakarta mostly belongs to the poor category represented by 28 respondents (57.1%), and a good level of motivation is found in 6 respondents (12.2%).

C. Bivariate Analysis

The correlation between knowledge and motivation of WUS in RW 06 Kricak Village, Tegalrejo Yogyakarta can be known by analyzing using the Kendall Tau correlation test statistic.

Table 4. Cross Table of Correlation between Knowledge Level and WUS Motivation related to Pap Smear Examination at RW 06 Kricak Village, Tegalrejo Yogyakarta 2018

Knowledge	Motivation						Total	p value
	Good	%	Fair	%	Poor	%		
Good	3	6.1	1	2.0	2	4.0	12.1	0.001
Fair	0	0	10	20.4	3	6.1	26.5	
Poor	3	6.1	4	8.1	23	46.9	61.1	
Total	6	12.2	15	30.7	28	57.1	100	

Source: Primary Data 2018

Table 4 is a cross table of the correlation between knowledge and motivation where it is shown that most of the respondents have poor knowledge and lack motivation, which is represented by 28 respondents (57.1%). Based on the analysis using Kendall Tau, it was found that there was a correlation between knowledge level and WUS motivation regarding pap smear examination as indicated by a significant value of 0.001 < 0.05 (p-value < α).

D. Coefficient Analysis

Table 5. Contingency Coefficient Results/Source: Primary Data 2018

		Value	Approx. Sig.
Ordinal by Ordinal	Contingency Coefficient	.591	.000
N of Valid Cases		49	

Table 5 shows that the correlation coefficient between the two variables in WUS in RW 06 Kricak Village, Tegalorejo Yogyakarta is 0.591 with a closeness value in the medium category.

Table 4 shows that from 49 respondents, 23 respondents (46.9%) lack knowledge and motivation, 4 respondents (8.1%) have insufficient knowledge and sufficient motivation, and 3 respondents (6.1%) have poor knowledge but with good motivation. The results of Kendall Tau's analysis revealed that the significant value was $0.001 < 0.05$ which indicated that H_0 was rejected so that it could be stated that there was a correlation between the level of knowledge and the mother's motivation to do a Pap smear. The value of the correlation coefficient between the two variables is 0.591 with the value of the close correlation which is included in the medium category.

1. Knowledge Level of WUS in RW 06 Kricak Village

Regarding the level of knowledge of Pap smear examination, the results of the univariate analysis of WUS respondents found that 6 respondents (12.2%) had good knowledge, 13 respondents (26.5%) had sufficient knowledge and 30 respondents (61.2%) lacked knowledge. Based on the results of filling out the questionnaire, it is known that the majority of respondents have poor knowledge of pap smear examination as a result of their ignorance or low knowledge of cervical cancer prevention through pap smears which can detect cervical cancer early (Rosidah & Ningrum, 2017). If a woman has extensive knowledge regarding the importance of the Pap smear, it will form a positive attitude that will lead to confidence in the early detection of cervical cancer (Bangsawan & Astuti, 2016). According to research (Djoar & Meiliantariasih, 2014), knowledge greatly influences a person's decision to take action, including the prevention of early detection of cervical cancer, which can be done through a Pap smear. According to (Siagian, 2015) research, there is a significant correlation between knowledge of cervical cancer and motivation to get a Pap smear. The lack of information on how to prevent and detect cervical cancer early, as well as the lack of awareness among women of childbearing age, are factors that contribute to the low awareness of having a Pap smear (Nurhafni, 2017). As a result, many women are late for a Pap smear examination, making treatment impossible (Bangsawan & Astuti, 2016). The high number of cervical cancer patients is because the disease does not cause symptoms, and most patients present when they are already in an advanced stage, with a lack of awareness to check their health (Farida & Nurhidayah, 2017).

2. Motivation for Pap Smear Examination of WUS in RW 06 Kricak Village

Based on the results of research on motivation to do pap smears on WUS, it is known that 6 respondents (12.2%) have a good level of motivation, 15 respondents (30.6%) have sufficient motivation level and 28 respondents (57.1%) have a low level of motivation. Motivation is a series of energies that encourage a person to get up to do something to achieve a predetermined goal (Ishak & Tanjung, 2013). The achievement of these goals is influenced by the strength and weaknesses of the motivation they have so it will affect the results obtained (Hartati *et al.*, 2016). Action will be more effective if the goal is clear and motivated. Therefore, anyone who wishes to motivate someone must first understand and know the person's life history, needs, and personality (Widiani *et al.*, 2014). Several factors influence a person's motivation, including intrinsic motivation, which refers to motivation from within a person and includes needs, activities, hopes, and interests. In addition to intrinsic motivation, there is extrinsic motivation, which occurs as a result of external environmental influences such as family encouragement, environment, and rewards actions taken by a WUS to detect cervical cancer early are heavily influenced by intrinsic and extrinsic motivation (Hartati *et al.*, 2016).

3. The Correlation between Knowledge Level and Motivation in Pap Smear Examination of WUS in RW 06 Kricak Village

Based on table 4, from 49 respondents, 23 respondents (46.9%) have poor knowledge and motivation, 4 respondents (8.1%) have poor knowledge with lack of motivation, and 3 respondents (6.1%) have poor knowledge with good motivation. From the results of the Kendall tau analysis, a significant value of $0.001 < 0.05$ was obtained, which indicated that H_0 was rejected. For this reason, it can be stated that there is a correlation between the level of knowledge and the motivation of WUS to carry out a pap smear examination. The correlation coefficient value between the two variables is 0.591 with the value of the close correlation included in the medium category. Knowledge can affect a person's awareness of the importance of health that deserves health services (Priyaswati *et al.*, 2015; Samrotun *et al.*, 2014). Knowledge will also result in changes that are influenced by several internal factors such as motivation and external factors to take a self-beneficial action. (Setyaningsih *et al.*, 2014; Soimah, 2017). This is consistent with the findings of a study conducted by (Hendriani, 2016) on the Correlation between Knowledge of Mothers Aged 30-55 Years About Cervical Cancer and Mother's Motivation to Do Pap Smear Examinations at RT 08 Manunggal Jaya Village, Tenggara Seberang District. In this study, a significant correlation was found between the mother's knowledge about cervical cancer and the mother's motivation in conducting a PAP Smear examination. In a study conducted on 49 respondents, most of the respondents or 21 people (42.9%) were 46-56 years old, while only 9 people (18.4%) were >56 years old. It was found that there were differences in the characteristics of the mother's age background. In terms of age characteristics of respondents, respondents already have maturity so that which has an impact on their way of thinking. Age in this case affects a person's grasping power and mindset (Ahmad, 2016). The older you get, the more you will develop your grasping power and mindset so that the knowledge you get is getting better. In middle age, individuals will play a more active role in society and social life and make more preparations for successful efforts to adapt to old age. Middle-age people will spend more time reading (Setyaningsih *et al.*, 2014). Based on education level, out of 49 WUS, most or 19 people (38.8%) are junior high school graduates, and only 8 respondents (16.8%) are university graduates. The higher a person's education level, the easier it is to receive

information, both from other people and from the mass media (Mayrita & Handayani, 2014). The more information a person receives, the more knowledge he gets about health, so the more knowledge he has (Tarigan & Butar, 2016).

In this study, it was found that most of the respondents had a junior high school education, and some with a higher education level. Thus, it can be concluded that the majority of respondents still have low knowledge about cervical cancer (Oktavyany et al., 2015). Other factors that influence motivation to undergo a Pap smear examination include economic status or employment. Socioeconomic conditions are very influential in the process of changing a person's health status because they can influence thoughts, which can change an action (Villasari & Kusariana, 2016). According to the frequency of distribution of work, the majority of respondents do not work. Work has an impact on one's income and the income of one's family. Low income has an impact on a family's ability to meet mandatory and other needs, and it is assumed that the Pap smear examination is not so important that it is ruled out (Siagian, 2015). Based on the results of the WUS questionnaire responses, it can also be seen that all respondents answered that they did not know the importance of the Pap smear examination, so no motivation emerged in them to take the pap smear examination. According to the findings of this study, the level of closeness of the correlation between the two variables was shown in the value of the correlation coefficient of 0.591, and the value of the close correlation between these two variables was classified as medium.

CONCLUSION

Based on the findings of the research and discussion about the correlation between knowledge level and WUS motivation for Pap Smear Examination in RW 06 Kricak Village, the following conclusions were reached:

1. The level of knowledge of WUS in RW 06 Kricak sub-district, Tegalorejo Yogyakarta shows that most of them have poor knowledge, which is indicated by 30 respondents with percentage results (61.2%).
2. The motivation of WUS in RW 06 Kricak Village, Tegalorejo Yogyakarta shows that most of them or 28 respondents (57.1%) have the poor motivation and only 6 respondents (12.2%) have good motivation.
3. There is a correlation between the level of knowledge and the mother's motivation in carrying out a pap smear examination, it can be seen from the significant value of 0.001 ($p < 0.05$) and the correlation coefficient value of 0.591 so that the close correlation between these two variables falls in the medium category.

Based on these findings, the researchers propose that health workers, particularly midwives, should increase health education for every woman of childbearing age (WUS) who visits a health facility about Pap smear examinations and the high risk of cervical cancer. Providing various information to women about the importance of pap smear exams and early detection of the high risk of cervical cancer is also important to do.

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