



Relationship of Knowledge About Cervical Cancer and PAP SMEAR with Early Detection Behavior of PAP SMEAR

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<p>Track Record Article</p> <p>Accepted: 03 June 2023 Revised: 24 October 2023 Published: 27 December 2023</p> <p>How to cite : Syahputri, R., & Sugiharto, S. (2023). Relationship of Knowledge About Cervical Cancer and PAP SMEAR with Early Detection Behavior of PAP SMEAR. <i>Contagion : Scientific Periodical of Public Health and Coastal Health</i>, 5(4), 1459–1467.</p>	<p style="text-align: center;">Abstract</p> <p><i>Cervical cancer is the third leading cause of death in Indonesia. Cervical cancer is usually only diagnosed when the cancer has entered an advanced stage. So the need for early detection as an effort to prevent cervical cancer. One of the most effective and commonly used methods to detect cervical cancer is Pap smear. The purpose of this study was to see the relationship between knowledge about cervical cancer and Pap smear with Pap smear early detection behavior. This study used analytic method with quantitative approach. The population of this study were all married women in Pancoran District, South Jakarta. Then, consecutive non-random sampling technique was used and 153 respondents were obtained with a questionnaire as a tool to obtain research data. Data collection was carried out from September to November 2023. Followed by analysis with the Chi-Square test using SPSS. Based on the results of the study, 58.2% of respondents have good knowledge and 72.5% of respondents have not done Pap smear examination from 158 respondents, there is no significant relationship between knowledge about cervical cancer and Pap smear with Pap smear early detection behavior (p-value=0.093). The conclusion of this study is that there is no relationship between knowledge about cervical cancer and Pap smear with early detection behavior of Pap smear in Pancoran District, South Jakarta. For further research, it is recommended to provide insight into cervical cancer in depth so that readers are aware of the importance of early detection of cervical cancer.</i></p> <p>Keyword: Cervical cancer, Knowledge, Pap smear</p>
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INTRODUCTION

The incidence of cancer in the world is entering a critical period, where every year the incidence of cancer is increasing. Cancer is an abnormal cell state where cells in certain parts of the body grow out of control and can invade other tissues to form other cancer cells (Amin & Maelani, 2014). There are many types of cancer in the world, one of which is cervical cancer (Cahyaningsih et al., 2020). The cervix or cervix/mouth of the uterus is the lower end of the uterus that protrudes into the vagina. Cervical Cancer is a malignant tumor that grows inside the cervix (the lowest part of the uterus that attaches to the top of the vagina) (Baroroh, 2023). Cervical cancer is a malignancy of the cervix that is mostly caused by human papillomavirus (HPV) infection. Human papilloma virus contributes to 20% of cancer deaths in low- and middle-income countries (Sari et al., 2020).

Cervical cancer is a disease that can be prevented and cured if detected and treated in the early / precancerous stages. Medical science has provided effective evidence-based interventions for the prevention, early detection and treatment of cervical cancer (Okunowo et al., 2018). But

in fact, cervical cancer is the fourth most common cancer among women in the world (Vu et al., 2018). The World Health Organization (WHO) explained that in 2018, an estimated 570,000 women were diagnosed with cervical cancer in the world and caused about 311,000 women to die (Pal et al., 2021). According to Globocan 2018 data, it is stated that based on the incidence of cervical cancer ranks second in Indonesia after breast cancer, there are 32,469 cases and ranks third based on mortality with 18,279 cases (Globocan, 2018; Novalia, 2023).

Middle-aged women aged 40-60 years tend to be susceptible to cervical cancer, while in women who are not yet 20 years old, cancer is still rarely found even though at this age women are already at a productive age (Patila & Sumargi, 2017). Cervical cancer often attacks women who have been sexually active since young, a history of sexually transmitted infections (STIs), frequent changes of sex partners, HIV / AIDS, smokers, and low socioeconomic status. Lack of knowledge about reproductive health and the importance of early detection is one of the causes of the higher mortality rate for women (Ratnasari & Kartika, 2017). This disease is also referred to as "hidden or silent" cancer because usually patients are asymptomatic and the diagnosis is incidental, so often patients come and are diagnosed when they have entered an advanced stage (Seng et al., 2018). Cervical cancer prevention efforts can also be carried out through the administration of the Human PapillomaVirus (HPV) vaccine (Triharini et al., 2019).

In Indonesia only 5 percent are screened for cervical cancer, so 76.6 percent of patients when detected have entered the Advanced Stage (IIIB and above), because cervical cancer is usually without any symptoms in its early stages. Screening can be done by doing a Pap smear test and also an Acetic Acid Visual Inspection (IVA) (Septadina, 2015). For early detection of cervical cancer is very necessary, one effective method to detect cervical cancer is the Pap smear, but a large group of women are still reluctant to do the test for various reasons (Ashtarian et al., 2017).

Pap smear is the most common screening and is a simple, safe, inexpensive, and non-invasive examination with a fairly high accuracy of diagnosis (Rasjidi, 2007). However, factors such as low knowledge about cervical cancer and early detection, finance, shame and fear, culture, religion and facilities and availability of health workers that make women ultimately exclude screening programs (Ashtarian et al., 2017; Adesoji, 2018). In fact, the proportion of the population that has done early detection is directly related to the decrease in mortality from cervical cancer (Kartika & Salim, 2017). There are about 50-90% of women who suffer from or die from cervical cancer never undergo screening (Owoeye & Ibrahim, 2013).

The level of maternal knowledge about cervical cancer in the East Jakarta area, it can be concluded that the most related factor in the level of knowledge is education with $r: 0.00$ smaller

than 0.05, which means that education has a greater relationship with knowledge, compared to other characteristics, therefore the mother's education level will affect the mother's knowledge so that it can help nurses in providing education about cervical cancer in the East Jakarta area (Hartati & Winarti, 2020). In Jakarta, IVA and Pap smear examinations are covered by BPJS Kesehatan. Cervical cancer screening coverage in Jakarta until 2016 is still relatively low, which is 5.15% of the national target of 37.4 million women aged 30-50 years. This coverage is still far from the WHO coverage target of around 80% of the total population. Previous studies in several cities in Jakarta reported that cervical cancer screening coverage is currently still low even though screening funding is borne by BPJS Kesehatan (Kristina et al., 2020). Primary prevention and early detection are key interventions to reduce disparities in the incidence and treatment of cervical cancer.

The importance of knowledge about cervical cancer as a prevention effort to avoid this cancer. Given the high number of deaths caused by cervical cancer, it is necessary to conduct this research. The purpose of this study was to determine the relationship between knowledge about cervical cancer and Pap smears with early detection behavior of Pap smears.

METHODS

This study used an analytic method with a quantitative approach. Quantitative research is defined as the systematic investigation of phenomena by collecting data that can be measured by performing statistical, mathematical or computational techniques (Abdullah et al., 2022). by using quantitative because it uses numbers, starting from data collection, interpretation of the data, and appearance of the results (Jayusman & Shavab, 2020). The design used is a cross-sectional design. The research was conducted in Pancoran District, South Jakarta from September to November 2023. The population in this study were all married women in Pancoran District, South Jakarta. Data collection technique using purposive sampling technique and obtained as many as 153 respondents. Purposive sampling is a data source sampling technique with certain considerations (Wilinny et al., 2019). The research instrument used a questionnaire as a tool to obtain research data. After the data is obtained, proceed with data analysis using the Chi-Square test using the SPSS software application.

RESULTS

Table 1. Characteristics of Respondents

Variable	Frequency	%
Age		
20-30 years	38	24,8
31-40 years	41	26,8
41-50 years	59	38,6
51-60 years	13	8,5
61-70 years old	2	1,3
Recent Education		
SD	9	5,9
SMP	22	14,4
SMA/K	76	49,7
College	46	30,1
Number of Children		
0	14	9,2
1	32	20,9
2	51	33,3
>2	56	36,6
Work		
Does not work	106	69,3
Work	47	30,7

From the results of the study with a total of 153 respondents, with an age range from 21 years to 65 years, most respondents aged 41-50 years were 59 (38.6%) respondents. In terms of education distribution, as many as 76 (49.7%) respondents had the last high school education, which was followed by universities as many as 46 (30.1%) respondents. Based on the number of children, the majority of respondents have more than two children as many as 56 (36.6%) respondents. Meanwhile, based on occupation, most respondents did not work as many as 106 (69.3%) respondents.

Table 2. Frequency Distribution of Knowledge Level About Cervical Cancer and Pap Smear with Early Detection Behavior of Pap Smear

Variable	Frequency	%
Knowledge		
Bad	64	41,8
Good	89	58,2
Early Detection Behavior		
Don't check	111	72,5
Check	42	27,5

In the results of this study, the majority of respondents had good knowledge about cervical cancer and Pap smears, namely as many as 89 (58.2%) respondents. Meanwhile, in terms of early detection behavior, data showed that 111 (72.5%) respondents had never had a Pap smear examination.

Table 3. Distribution of Reasons Respondents Have Not Conducted Early Detection Pap Smear Examination

Variable	Frequency	%
Reasons not to have a Pap smear		
Shame	19	17,1
Fear of pain	41	36,9
Expensive fees	36	32,4
Pap smear sites are difficult to reach	15	13,5
Knowledge of BPJS Kesehatan covers the cost of the Pap smear examination		
Know	23	20,7
Do not know	88	79,3
Willing to do a Pap smear if the cost of the Pap smear is free		
Already	76	68,5
Do not	35	31,5
Willing to do a Pap smear if the Pap smear does not hurt and is very useful for preventing cervical cancer		
Already	82	73,9
Do not	29	26,1

Furthermore, the most reasons why respondents have not done an early detection examination of Pap smears are fear of pain during the examination, which is 41 (36.9%) respondents and followed by reasons for expensive costs as many as 36 (32.4%) respondents.

Table 4. Relationship of Knowledge About Cervical Cancer and Pap Smear with Early Detection Behavior of Pap Smear

Variable	Early Detection Behavior		
	No Check	Check	<i>p-value</i>
Knowledge			
Bad	51 (79,7%)	13 (20,3%)	0,093
Good	60 (67,4%)	29 (32,6%)	

Based on the calculation results using the *Chi-Square* statistical test, the *p-value* = 0.093 was obtained. It can be concluded that there is a meaningless relationship between knowledge of cervical cancer and Pap smears and early detection behavior of Pap smears.

DISCUSSION

This research was conducted in Pancoran District, South Jakarta with 153 respondents. Based on table 2, from the total respondents, 89 (58.2%) respondents were well-informed. This is in contrast to the results of a study conducted by Okunowo (2018), which was conducted on patients attending the obstetrics and gynecology clinic at the University of Lagos Teaching Hospital in Nigeria. Most respondents were aged 31-40 years, had no children, and were working. The results showed that from a total of 205 respondents, most of them had poor knowledge about

the symptoms and risk of cervical cancer, namely 123 (60%) and 173 (84.4%) respondents, respectively. Then, more than half of respondents, as many as 113 (55.1%) respondents know about Pap smears and as many as 65 (31.7%) respondents have knowledge about the purpose of Pap smears (Okunowo et al., 2018).

In this study based on early detection behavior, it was found that as many as 111 (72.5%) respondents had never had a Pap smear examination and as many as 42 (27.5%) respondents had done a Pap smear examination (table 2). When viewed from the reasons why respondents have never done a Pap smear examination, there are reasons for fear of illness as many as 41 (36.9%) respondents, expensive costs as many as 36 (32.4%) respondents, embarrassment as many as 19 (17.1%) respondents, and because the Pap smear place is difficult to reach as many as 15 (13.5%) respondents. (Table 3) This result is in line with research conducted by (Abulizi et al., 2018) in China, found respondents who had never done a Pap smear examination were 6,572 (92.6%) respondents from a total of 7,100 respondents. This can be because as many as 65.1% of respondents have elementary school education and as many as 95% of respondents are farmers, Then in his research it was mentioned that the reasons respondents did not do regular Pap smear examinations were as follows: because they did not understand about the usefulness of Pap smear examination alone (36.1%), did not realize the importance of Pap smear examination and did not show any symptoms (20.8%), and do not know the importance of Pap smear examination and worry about cost (15.7%). In addition, 73 respondents knew the importance of the Pap smear but did not do it for reasons: no symptoms (0.3%), worry about costs (0.3%), no transportation (0.2%), no time (0.1%), embarrassment (0.1%), and worry about pain (0.6%). Cultural barriers can also lead to negative thinking about early detection, including concerns about exposing private body parts (Abulizi et al., 2018).

Meanwhile, in the study of Okunowo (2018), out of 158 respondents, the most reason why respondents had never done a Pap smear examination was because of care, namely as many as 85 (53.8%) respondents, which was then followed by 49 (31%) respondents because the doctor did not recommend it (Okunowo et al., 2018).

The results of the Chi-Square statistical test analysis in this study showed a p-value = 0.093, where this means H_0 is accepted and H_a is rejected, it can be concluded that there is no significant relationship between knowledge about cervical cancer and Pap smears with early detection behavior of Pap smears. This does not indicate that good knowledge in respondents can influence a behavior. This research is not in line with previous research by Nasution & Sinaga (2021) conducted in the FK UMSU Assisted Family Environment, in his research showed a significant relationship between the level of knowledge and participation in the Pap smear

examination with a p-value of 0.006. Where in the study it was found that 65.4% of respondents had a good level of knowledge and as many as 51.6% of respondents participated in the Pap smear examination. It was stated that from 31 respondents, 14 (45.2%) respondents were well-informed and as many as 6 (19.4%) respondents had never done a Pap smear. Meanwhile, as many as 2 (6.5%) respondents with poor knowledge have had a Pap smear examination and as many as 9 (29%) respondents have never had a Pap smear examination (Nasution & Sinaga, 2021). This difference can be caused by the number of respondents who differ greatly and the presence of environmental factors.

Then from 111 respondents who had never done a Pap smear examination, it was found that 88 (79.3%) respondents did not know that BPJS Kesehatan facilitates free Pap smear examination for women BPJS participants. Respondents' ignorance of this information is one of the factors why most respondents have never had a Pap smear examination. This can be concluded from the respondents' answers to the next question, namely as many as 76 (68.5%) respondents answered that they are willing to do a Pap smear examination if the examination is free of charge and as many as 82 (73.9%) respondents are willing to do an examination if the Pap smear examination does not cause pain and is very useful for preventing cervical cancer.

This shows that in addition to knowledge, there are other factors that can prevent a person from carrying out early detection of Pap smears. Based on the Health Belief Model (HBM), there are four main constructs that affect an individual's beliefs, namely perceived threats, perceived efficacy, perceived obstacles, and perceived self-confidence (Yeo et al., 2018). This means that although the level of knowledge about cervical cancer is high, it is possible that early detection of cervical cancer Pap smears is low by considering several health factors. For example, knowing that having cervical cancer will reduce the mental health of the patient.

CONCLUSIONS

Based on research conducted in Pancoran District, South Jakarta, it was concluded that the level of knowledge of women about cervical cancer and Pap smears was 89 (58.2%) respondents with good knowledge and 64 (41.8%) respondents with poor knowledge. The number of women who have had a Pap smear examination is 42 (27.5%) respondents, while those who have never done early detection of a Pap smear are 111 (72.5%) respondents. Then, there was no relationship (p-value = 0.093) between the level of knowledge about cervical cancer and Pap smears with early detection behavior of Pap smears.

It is hoped that it can increase counseling efforts to the community so that public knowledge and understanding of cervical cancer and the importance of early detection examinations can be better. In addition, it is expected that health workers provide information that the government through BPJS Kesehatan has facilitated free cervical cancer early detection examinations. For future researchers, it is expected to add other variables related to early detection behavior of Pap smears.

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