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PAP TEST PRACTICE AND BARRIERS OF NURSES IN BANDUNG, WEST JAVA

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Abstract

The lack of interest from the public and health workers, such as nurses to carry out a pap test, is one of the triggers of cervical cancer cases. The purpose of this study was to identify the implementation of pap tests and barriers of nurses in Bandung, West Java. This study used a cross-sectional descriptive study design with a sample of 286 married nurses. Data collection was conducted during two months. The analysis was conducted by the Fisher exact test or chi-square test. The results showed that the level of education and religion had a significant relationship with the pap test behavior (p= 0.000; p= 0.031). The most perceived barrier was that respondents felt uncomfortable with the male examiners. So it was recommended to provide female examiners in the ob-gyn section in the hospitals and to improve the nurses' perceptions with pap test.

Keywords: barrier, nurse, pap smear, practice

Abstrak

Perilaku dan Hambatan Pap Smear pada Perawat di Kota Bandung, Jawa Barat. Fenomena yang terjadi pada kasus kanker serviks adalah minimnya minat dari masyarakat bahkan petugas kesehatan seperti perawat untuk melakukan pap smear sebagai bentuk pencegahan kanker serviks. Tujuan penelitian ini adalah untuk mengidentifikasi pelaksanaan pap smear serta hambatannya pada perawat di Kota Bandung, Jawa Barat. Penelitian ini menggunakan desain studi deskriptif cross-sectional dengan jumlah sampel 286 perawat yang sudah menikah. Pengumpulan data dilakukan pada Februari hingga Maret 2018. Analisis menggunakan fisher exact test atau chi-square test. Hasil penelitian menunjukkan bahwa tingkat pendidikan dan agama memiliki hubungan yang signifikan dengan perilaku pap smear (p=0,000; p=0,0301). Hambatan yang paling dirasakan adalah responden merasa kurang nyaman dengan pemeriksa laki-laki sehingga direkomendasikan untuk penyediaan pemeriksa perempuan pada bagian obgyn di rumah sakit serta memperbaiki persepsi perawat yang salah terhadap pap smear.

Kata Kunci: hambatan, pap smear, perawat, perilaku

Introduction

Cervical cancer is the most common cancer affecting women and the leading cause of mortality in women throughout the world (WHO, 2014). One prevention method is a pap smear. Routine Pap test has been shown to reduce mortality from cervical cancer by 70–80% in all countries and 90% in almost all developing countries (Sasieni, Castanon, & Cuzick, 2009). Pap smear examination is more effective than another test such as visual acetic acid (IVA)

inspection due to pap smear examination into the vaginal part to see the cervical surface cells so that it can distinguish pre-cancerous cells and cancer (Spencer, 2007).

Cervical cancer has the potential to be prevented by early detection because to develop into cancer takes approximately 15–20 years (WHO, 2014). However, the problem that occurs is the low participation of women to do a pap test. A study conducted in Indonesia reported that out of 80.991 women given cervical cancer edu-

cation, only 22.989 were screened with 17,534 normal results, 970 showed pre-cancerous results, and 19 people had positive cervical cancer (Nuranna et al., 2012). Besides that Nuranna et al. (2012) revealed that people tend to seek treatment when they experience symptoms of advanced cancer and are difficult to treat. It also illustrates that the public does not understand the importance of early prevention compared to treatment after being diagnosed with cervical cancer. It is also experienced by health workers such as nurses.

A study conducted in India showed that out of 253 nurses, only 16.6% (24 people) were aware of pap smears and had ever undergone a pap smear test. 76% of staff only did pap smears once, 21.4% twice, and 2.4% three times. As many as 83.4% of nurses did not do pap smears because they did not feel the symptoms of cervical cancer (41%), feeling uncomfortable about the examination procedure as much as 25%, and fear when knowing the results of the examination as much as 16% (Kar & Rahman, 2015). Also, the pap smear examination performed on genital organs makes women feel uncomfortable because it is related to privacy, so women are reluctant to do pap smears (Jain, Bagde, & Badge, 2016).

The problem that occurs among nurses is undoubtedly contrary to the role of nurses as role models and female nurses also have the probability of infected by HPV. In providing nursing care, one of which is preventive, nurses have more time to interact with the community, so it will be easy to change people's behavior by making themselves a role model. The purpose of this study was to describe the implementation of pap tests and the obstacles felt by health workers, especially nurses, in the city of Bandung, West Java.

Methods

This study used a cross-sectional method with a descriptive design. The research took place at three hospitals in Bandung City, West Java for two months. This research was using cluster sampling with 286 nurses. The inclusion criteria were the female nurses who had been married for at least one year or had sex before marriage. The exclusion criteria in this study were female nurses who were pregnant. This study applied questionnaires, namely a questionnaire respondent's characteristics to measure barriers pap test used health belief model scale. The characteristics of respondents contain respondent code, address, origin of the hospital, age, marital status, last education level, the number of children, behavior of pap smear. Characteristics respondents were analyzed using frequency distribution. As for the barrier questionnaire containing 11 statements have been tested the validity and reliability of data using Pearson and Alpha Cronbach 0,88. These questionnaires were developed by the researchers by using a Likert scale with references from Guvenc (2011), Abotchie and Shokar (2009), and Eze, Umeora, Obuna, Egwuatu & Ejikeme (2012) about health belief model in cervical cancer and pap test. Before collecting data, ethical clearance from Medical Research Ethics Committee of Universitas Padjadjaran Faculty of Medicine was held on February 14, 2018, number: 59/UN6.KEP/EC/2018. Univariate analysis was used to find out the frequency of each variable. In the univariate analysis stage, variable barriers, nurses' behavior on pap smear, and characteristics of respondents were analyzed descriptively (rate and percentage). Bivariate test used Chi-square test or Fisher exact test.

Results

This study showed that from 286 respondents of large respondents less than 40 years (91.3%), had the last level of education DIII (58%). Almost all respondents are Muslim (75.2%). Almost all respondents were married (96.6%) and had fewer than two children (89.5%). Some 41.3% of respondents said they did not use contraception. The majority of respondents claimed that they did not carry out a pap test for at least the last one year (88.5%). Whereas

from the factors associated with nurse pap smear assignment (p= 0.000; 0.031) (Table 1).

The results of this study also illustrated that 80.4% of nurses know the latest information about the importance of pap tests and updated information on cervical cancer from mass media, advertisements, doctors, and discussions with colleagues (Table 2).

Associated with the barriers to do pap test, the majority of respondents answered that they tended to want to be examined by female doctors (54.6%), shame (50.2%), forgetfulness (39.2%), inspection procedures that made respondents uncomfortable (37.6%), worried about results (37.1%), lazy (34.3%), too old age (30%), no friend support (29.7%), and no time for a pap test (26.9%) (Table 3).

Tabel 1. The Characteristics of The Respondent and Factor Associated with The Practice of Pap Test

Variable	f	% _	Pap Smear Behavior				
			Yes		No		p
			f	%	f	%	· •
Age							
<u><</u> 40	261	91.3	28	10.70	233	89.30	0.145
>40	25	8.7	5	20	20	80	
Marital status							
Marriage	282	98.6	32	11.30	250	88.70	0.389
Divorce	4	1.4	1	25	3	75	
Education level							
SPK	12	4.2	6	50	6	50	0.000
Diploma	166	58	16	9.60	150	90.40	
Bachelor	108	37.8	11	10.20	97	89.80	
Children							
<2	256	89.5	28	10.90	228	89.10	0.253
<u>≤</u> 2 >2	30	10.5	5	16.70	25	83.30	
Religion							
Christian	61	21.3	5	8.20	56	91.80	0.031
Catolic	10	3.5	4	40	6	60	
Moeslem	215	75.2	24	11.20	191	88.80	
Contraception							
None	118	41.3	13	11.20	103	88.80	0.160
Oral	32	11.2	7	21.90	25	78.10	
Injection	26	9.1	2	7.70	24	92.30	
IŬD	93	32.5	7	7.50	86	92.50	
Condom	17	5.9	4	23.50	13	76.50	

Tabel 2. Practice Towards Pap Test Among The Study Participants

Variable		No	Yes	
variable	f	%	f	%
Newest information (mass media, doctor consul, advertisements)	56	19.6	230	80.4
Pap test for at least the last year	253	88.50	33	11.50

Tabel 3. Barriers Towards Pap Test

Variabel	Disagree			Agree		
variabei	f	%	f	%		
Worry	180	62.9	106	37.1		
Embarassment	142	49.8	144	50.2		
Don't have time	209	73.1	77	26.9		
Feel uncomfortable for pelvic examination	178	62.4	108	37.6		
Forget	174	60.8	112	39.2		
Too old	200	70	86	30		
Prefer female doctors	130	45.4	156	54.6		
Lazy	188	65.7	98	34.3		
No friends	201	70.3	85	29.7		

Discussion

There have been many studies on cervical cancer aimed at women in general, but the research that determines the behavior of pap test in nurses, especially in Indonesia, is still rare. The results of this study focus on planning prevention of cervical cancer, especially for health workers in terms of the perceived barriers by nurses. Nurses who, in fact, have more knowledge about cervical cancer turned out to have quite low pap smear behavior (88.5%). It is comparable with the research of Jain et al. (2016), Kar and Rahman (2015), Yoshino et al. (2012), which shows the lack of participation of nurses to do pap test. Although information related to pap tests and cervical cancer they get from various media or discussions with doctors and colleagues, it is not able to encourage individuals to do pap tests (Awodele et al., 2011). Even though we know that nurses are the front line in the prevention process both as educators and as role models.

In this study, the level of education is a factor associated with pap smear behavior among nurses. For respondents who have more than ten years of work experience, nurses are more often exposed to information related to pap tests that encourage them to be able to do pap tests. However, respondents who did not do pap tests were not influenced by the level of education, but there were obstacles that allowed them not

to do pap tests. This research is not in line with previous research, which states that individuals with a high level of education do not necessarily have high knowledge and awareness of their health (Rahayu & Ochoa, 2015). However, it should be noted that the significant results in this study are more due to the proportion of each level of education that is disproportionate. It showed that the proportion of respondents who have SPK education level is less than other education levels. So it is necessary to study further the relationship between the level of education and the behavior of pap tests.

Another factor, religion also has a significant relationship with pap smear behavior (p=0.031). The respondents in this study were mostly Muslim (75.2%), with 191 people who did not do pap tests (88.8%) and 24 people who wanted to do pap tests (11.2%). In the other research show that an individuals beliefs are associated with their perspective on health as a punishment or a blessing from God, then they tend not to do a pap test (Aasim, Monica, Crista, Zahra, & Far, 2014). Some people see that illness is obtained absolutely because of God's gift and only God can cure the disease. But in this research, it showed that the pap test relates to the privacy of women so that married women who have confidence that it is important for them to get permission in advance to check the parts with their husbands. It is very important the role of the husband as a support for women to do pap tests. It is important for churches and mosques to hold special forums to discuss health issues as important information obtained from spiritual institutions.

In this study, it was also found that marital status did not have a significant relationship with pap smear behavior. Of course, this is inversely proportional to previous research, which states that marital status has a significant relationship with the practice of pap test because in almost most women experience the process of pregnancy so that women will visit the doctor for preparation for pregnancy or after pregnancy (Al-Naggar, 2012). Married women will start thinking about going through the pregnancy phase and beginning to be more responsible for their reproductive organs. It usually women to visit a gynecologist to prepare for conception or examine the reproductive organs. It also encourages women to do pap smears that aim to see the condition of the cervix (Savas & Taskin, 2011). But not all women have the same reason for pap smears. Married women who have a relatively young age are often associated with the inability of individuals to make pap smears. In this study, almost all married women do not do pap test not because they are married, but rather because of their belief in protecting their health. Even though they are a health worker, this does not guarantee that they are aware of the importance of pap tests. It has become a habit for some people to do Pap tests only to be done if there are signs and symptoms that lead to cervical cancer. It certainly will reduce the possibility of recovery from cervical cancer.

Age does not have a significant relationship with pap smear behavior. Although age is one of the factors that can describe one's maturity and the level of understanding and awareness of the importance of preventing illness. It is also mentioned by McFarland (2013) that age does not have a meaningful relationship with pap smear behavior (p= 0.160). Cervical cancer often attacks women of fertile age. In this

study, almost all respondents were in the reproductive age category so that the HPV would more easily infect cervical cells. Age is directly proportional to the level of maturity of one's thinking. Maturity of the individual's mindset is shown from behavior that benefits himself like pap test behavior.

The low rate of cervical cancer depends on the success of the prevention program, one of which is a Pap test. But in developing countries, it is estimated that only 5–10% of women have done Pap tests (Roy & Tang, 2008). Most of the respondents did not do Pap tests (88.5%). It was triggered due to several obstacles that caused individuals not to do pap tests.

In this study, several barriers have been identified. Respondents mentioned the most felt obstacle was because the examiner was male. Oon et al. (2011) in Malaysian reported that the perceived barriers were feeling of shame related to examination procedure and the different gender of the examiner who mostly was male. Pap smear is performed on the vaginal area, which is a sensitive area of women so that many women choose not to do Pap tests and are encouraged by cultural and belief factors where sensitive areas cannot be seen by anyone other than their husbands.

Another barrier is forgetting and worrying about the pap smear results. Research conducted by Dim, Ekwe, Maduboku, Dim, and Ezegwui (2009) also mentions that female medical practitioners feel fear of procedures and the results they will receive. When they find out the results of the pap smear, they cannot imagine the treatment process and the effects of the treatment they will undergo (Kar & Rahman, 2015).

Some respondents also mentioned that the reason they did not do pap test was that they were not comfortable with the procedure. The pain that is felt during the examination often causes individuals to be traumatized to do a reexamination (Kar & Rahman, 2015).

This finding has implications of nursing interventions and suggests that broad-based nursing initiatives will be needed to overcome these barriers. We need to prepare special reorientation programs to sensitize nurses about cervical cancer and pap test. It is important to focus and more emphasize early detection and treatment of cervical cancer. We recommended that hospitals should periodically arrange seminars and training for nurses. Training is good to be orientation program to newly nurses.

We need to make nurses as a key player in creating awareness of the importance of early detection of cervical cancer and pap test because they play an important role in modifying awareness of health behaviors. "Prevent is better than cure."

The limitation of this study on the design and sampling, because it was a cross-sectional study. There are several factors that might influence the results of this study, so it needs to be explored again related to the other factors.

Conclusions

This study found that the level of education and religion had a significant relationship with the behavior of the Pap test. Most nurses do not do Pap tests because they feel barriers such as discomfort related to the opposite sex examiner and feeling embarrassed if the examiner is a colleague. Shame is felt also because the examination is related to something that is sensitive and is privacy. The results of this study recommended that the hospital provide female health personnel in pap smear examination services to overcome the obstacles of the respondents so that there is no discomfort related to the examiner and provide understanding regarding the examination so as not to cause feelings of shame and fear related to the examination results later on. Continued information is also needed and the facility for health workers to do a pap test, so it is expected that nurses will be active for pap tests as an effort to prevent cervical cancer.

References

- Abotchie, P.N., & Shokar, N.K. (2009). Cervical cancer screening among college students in Ghana: Knowledge and health beliefs. *International Journal of Gynecologic Cancer*, 19 (3), 412–416. doi: 10.1111/IGC. 0b013e3181a1d6de.
- Al-Naggar, R. (2012). Practice and barriers towards pap smear test from a public hospital in Malaysia. *J Community Med Health Edu*, 2(132), 2. doi: 10.4172/jcmhe. 1000132.
- Awodele, O., Adeyomoye, A.A.A., Awodele, D. F., Kwashi, V., Awodele, I.O., & Dolapo, D.C. (2011). A study on cervical cancer screening amongst nurses in Lagos University Teaching Hospital, Lagos, Nigeria. *Journal of Cancer Education*, 26 (3), 497–504. doi: 10.1007/s13187-010-0187-6.
- Dim, C., Ekwe, E., Madubuko, T., Dim, N., & Ezegwui, H. (2009). Improved awareness of *Pap smear* may not affect its use in Nigeria: a case study of female medical practitioners in Enugu, southeastern Nigeria. *Transactions of the Royal Society of Tropical Medicine and Hygiene, 103* (8), 852–854. doi: 10.1016/j.trstmh.2009.03.020.
- Eze, J.N., Umeora, O.U., Obuna, J.A., Egwuatu, V.E., & Ejikeme, B.N. (2012). Cervical cancer awareness and cervical screening uptake at the Mater Misericordiae Hospital, Afikpo, Southeast Nigeria. *Annals of African medicine*, 11 (4), 238. doi: 10.4103/1596-3519.102856.
- Guvenc, G., Akyuz, A., & Açikel, C.H. (2011). Health belief model scale for cervical cancer and Pap smear test: Psychometric testing.

- *Journal of Advanced Nursing*, 67 (2), 428–437. doi: 10.1111/j.1365-2648.2010.05450.x.
- Jain, S., Bagde, M., & Badge, N. (2016). Awareness of cervical cancer and *Pap smear* among nursing staff at a rural tertiary care hospital in Central India. *Indian Journal of Cancer*, 53 (1), 63–66. doi: 10.4103/0019-509X.180823.
- Kar, S., & Rahman, H. (2015). Knowledge, attitudes and practice toward cervical cancer screening among Sikkimese nursing staff in India. *Indian Journal of Medical and Pediatric Oncology*, 36 (2), 105–110. doi: 10.4103/0971-5851.158840.
- McFarland, D.M. (2013). Associations of demographic variables and the Health Belief Model constructs with Pap smear screening among urban women in Botswana. *International journal of women's health*, 5, 709–716. doi: 10.2147/IJWH.S50890.
- Nuranna, L., Aziz, M.F., Cornain, S., Purwoto, G., Purbadi, S., Budiningsih, S., ... & Peters, A. A.W. (2012). Cervical cancer prevention program in Jakarta, Indonesia: See and Treat model in developing country. *Journal of* gynecologic oncology, 23 (3), 147–152. doi: 10.3802/jgo.2012.23.3.147.
- Oon, S.W., Shuib, R., Ali, S.H., Hussain, N.H.N., Shaaban, J., & Yusoff, H.M. (2011). Factors affecting health seeking behaviour among kelantanese women on pap smear screening. *Proceedings of Economics Development & Research*, 20 (1). doi: 10.13140/2.1.2171. 8729.
- Rahayu, D.S., & Ochoa, M. (2015). Cervical cancer awareness: An information dissemination campaign in Indonesia. *Jurnal Keperawatan Padjadjaran*, *3* (1). https://doi.org/10.24198/jkp.v3i1.97.g91.

- Roy, B., & Tang, T. S. (2008). Cervical cancer screening in Kolkata, India: Beliefs and predictors of cervical cancer screening among women attending a women's health clinic in Kolkata, India. *Journal of Cancer Education*, 23 (4), 253. doi: 10.1080/08858190802189105.
- Sasieni, P., Castanon A, & Cuzick J. (2009). Effectiveness of cervical screening with age: population based case-control study of prospectively recorded data. *BMJ* 339, b2968. doi: 10.1136/bmj.b2968.
- Savas, H.G., & Taskin, L. (2011). Determining nurse-midwives' knowledge of the Papsmear test and their rate of being tested in Turkey. *Asian Pacific Journal of Cancer Prevention*, 12 (5), 1353–1360.
- Spencer, J. (2007). *Deadly Disease And Epidemics Cervical Cancer*. New York: Chelsea House.
- Yoshino, Y., Ohta, H., Kawashima, M., Wada, K., Shimizu, M., Sakaguchi, H., ... & Aizawa, Y. (2012). The knowledge of cervical cancer and screening adherence among nurses at a university-affiliated hospital in Japan. *Kitasato Med J*, 20 (29), 280.
- WHO. (2014). Comprehensive cervical cancer control a guide to essential practice (2nd Edition). Geneva: World Health Organization. Retrieved from https://apps. who.int/iris/bitstream/handle/10665/144785/9789241548953_eng.pdf;jsessionid=B6A77 CD9A963EE217DEEA9D16863D061?sequ ence=1.