Health Promotion toward Knowledge and Intention for Early Detection of Cervical Cancer in Commercial Sex Workers

Promosi Kesehatan terhadap Pengetahuan dan Niat untuk Deteksi Dini Kanker Serviks pada Pekerja Seks Komersial

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Abstract

Cervical cancer is one of the cancer types that become a haunting danger for many women in the world. In Indonesia, the prevalence rate reached 0.8% or an estimated 98,692 patients. Its prevalence increased to 10% in the commercial sex worker group. This study aimed to explain the effect of health promotion on knowledge and intention for early detection of cervical cancer using the inspection of visual acetate method in the commercial sex workers. This study was quantitative with a quasi-experimental type, one group of pretest and posttest design. The population sample included the commercial sex workers at Genteng Subvillage, Patimban Village, Pusakanegara Subdistrict, Subang District and was determined by using an accidental sampling technique with 35 respondents. Data analysis used McNemar's test. The results showed that there was an increase in knowledge after the health promotion activity and a significant change in intention to perform early detection of cervical cancer. From the statistical test, a p value of 0.000 was obtained for each variable. In conclusion, health promotion has a significant effect on the improvement in the knowledge and intention of the respondents.
Keywords: Cervical cancer, health promotion, inspection of visual acetate

Abstrak

Salah satu jenis kanker yang menjadi hal yang menakutkan bagi perempuan di dunia adalah kanker serviks. Di Indonesia, jumlahnya mencapai 0,8% atau diperkirakan sebanyak 98.692 penderita. Prevalensinya meningkat sampai 10% pada kelompok pekerja seks komersial (PSK). Penelitian ini bertujuan menjelaskan pengaruh promosi kesehatan terhadap pengetahuan dan niat untuk melakukan deteksi dini kanker serviks dengan metode inspeksi visual asetat (IVA) pada PSK. Penelitian ini merupakan penelitian kuantitatif dengan jenis kuasi eksperimen dengan rancangan *one group pretest* and *posttest design*. Sampel populasinya PSK di Dusun Genteng, Desa Patimban, Kecamatan Pusakanegara, Kabupaten Subang ditentukan dengan menggunakan teknik *accidental sampling* dengan sampel sebanyak 35 responden. Analisis data menggunakan uji Mc Nemar. Hasil menunjukkan bahwa terdapat peningkatan pengetahuan setelah kegiatan promosi kesehatan serta perubahan niat untuk melakukan deteksi dini kanker serviks yang signifikan. Dari uji statistik, didapatkan nilai p 0,000 untuk masing-masing variabel. Dapat disimpulkan bahwa promosi kesehatan berpengaruh signifikan terhadap peningkatan pengetahuan dan niat responden.
Kata kunci: Kanker serviks, promosi kesehatan, inspeksi visual asetat

Introduction

Cervical cancer is considered the fifth most common cancer in women worldwide.[1] According to the GLOBOCAN data from the International Agency for Research on Cancer, in 2012, there were 14.1 million new cancer cases and 8.2 million cancer deaths worldwide. Cervical cancer is a frightening specter for women in the world.[2] Similarly in Indonesia, an estimated 40,000 cases of cervical cancer are found every year. According to pathology-based cancer data in 13 laboratory pathology centers, cervical cancer is a cancer type that has the largest number of patients in Indonesia at approximately 36%.[1]

All women are at risk to develop cervical cancer, but some evidence suggests a strong relation between a sexual relationship and the risk of cervical cancer. For instance, women who engaged in a sexual relationship at an early age (<18 years) and women with many sexual partners have a higher risk of cervical cancer.[1] Commercial sex workers are a group susceptible to cervical cancer because they usually have many sexual partners, increasing their risk to as much as 10–14.2 times.[3]

In general, cervical cancer patients who come to seek treatment are already at the final stage, and then it is often too late to do the treatment, although determining the presence and absence of cervical cells can be done through early detection. One of the ways is the inspection of visual acetate (IVA) method, which is fairly cheap and easy to do and is very effective in detecting the presence of cervical cancer. A study showed that IVA has a sensitivity of 90.9%, specificity of 99.8%, positive predictive value of 83.3%, and negative estimation value of 99.9% compared with cytology. This suggests that the IVA examination has a similar ability to cytologic examination in detecting cervical pre-cancer lesions.[4]

A limited access to accurate information is believed to be one of the causes of high cervical cancer cases in Indonesia. Another cause is due to less awareness to perform early detection. That is why most of the cases are found at the final stage and can cause death.

In West Java, there are about 8,000 cases of cervical cancer each year, in which the highest number of patients comes from the northern coast (*pantura*).[5] This can be understood because *pantura* is a popular place that practices prostitution. From the preliminary study conducted, one of the known prostitution areas is Genteng, Patimban Village, Pusakanegara Subdistrict, Subang District. Therefore, the study was conduct in the region and intervention was applied through a health promotion activity expectedly to improve the knowledge and intention of the commercial sex workers to perform early detection of cervical cancer with the IVA method.

The aim of the study was to explain the effect of health promotion on increasing the knowledge and intention to perform early detection using the IVA method in commercial sex workers.

Method

This study was a quasi-experimental study type with an analytical descriptive of one group pretest and posttest design. The measurement was done before and after the intervention. Knowledge and intention to do early detection were measured using questionnaires. The intervention used for this study was a health promotion activity through a lecture, video playback, booklet, and poster. The population sample included 35 commercial sex workers at Genteng Subvillage, Patimban Village, Pusakanegara Subdistrict, Subang District that were counted using a formula of two means. Data were collected using questionnaires, and univariate analysis was done to determine the knowledge and intention of the commercial sex workers on early detection of cervical cancer using the IVA method, both before and after the promotion efforts. Bivariate analysis was initially planned using the t-dependent test, but the data collected were not normally distributed to explain the effect of the promotion effort to increase the knowledge, attitude, and intention of the commercial sex workers on early detection of cervical cancer using the IVA method. This study used the McNemar test instead.

Results

Table 1 shows that prior to a health promotion activity, most respondents had poor knowledge of cervical cancer detection using the IVA method (82.9%) and more than half had no intention to perform cervical cancer detection using the IVA method (54.3%). Table 2 shows that after a health promotion activity, most respondents had good knowledge of cervical cancer detection using the IVA method (68.6%), and almost all respondents had an intention to perform early detection of cervical cancer using the IVA method.

In Table 3, there is a significant change in the knowledge of respondents by 63%, from 6% before to 69% after the health promotion activity. Based on the results of the statistical test, a p-value of 0.000 was obtained, which means that the health promotion activity implemented had a significant effect on knowledge. Table 4 shows a significant change in the intention of respondents by 48%. Before the efforts of health promotion were made, only 46% of the respondents intended to take early detection of cervical cancer through the IVA method, but the rate increased to 94% after the health promotion activity. From the results of the statistical test, a p value of 0.000 was obtained, which means that the health promotion activity conducted had a significant effect on the intention.

In Table 5, the results of the multivariate analysis indicated two variables affecting intention on early detec-

Table 1. Frequency Distribution of Knowledge and Intention Before the Intervention

Variable	Category	Number (n)	Percentage (%)
Knowledge of cervical cancer and early detection of cervical cancer using the IVA method	Poor	29	82.9
	Good	6	17.1
Intention in early detection of cervical cancer using the IVA method	No intention	19	54.3
	With intention	16	45.7

Table 2. Frequency Distribution of Knowledge and Intention After the Intervention

Variable	Category	Number (n)	Percentage (%)
Knowledge of cervical cancer and early detection of cervical cancer using the IVA method	Poor	11	31.4
	Good	24	68.6
Intention in early detection of cervical cancer using the IVA method	No intention	2	5.7
	With intention	33	94.3

Table 3. Influence of Health Promotion on Knowledge

Variable	Category	Knowledge After Health Promotion		Total	p Value
		Poor	Good		
Knowledge before health promotion	Poor	11	18	29 (83%)	0.000
	Good	0	6	6 (17%)	
Total		11 (31%)	24 (69%)	35 (100%)	

Table 4. Effect of Health Promotion on Intention

Variable	Category	Intention After Health Promotion		Total	p Value
		No Intention	With Intention		
Intention before health promotion	No Intention	2	17	19 (54%)	0.000
	With Intention	0	16	16(46%)	
Total		35 (100%)	2 (6%)	33 (94%)	

Table 5. The Results of Multivariate Analysis

Variable	B	Wald	p Value	OR	95% CI for Exp (B)	
					Lower	Upper
Attitude	2.4	6.8	0.009	10.9	1.80	66.5
Level of education	1.9	3.9	0.046	6.5	1.03	41.3

Notes:
OR = Odds Ratio, CI = Confidence Interval

tion of cervical cancer using the IVA method, namely, attitude (p value = 0.009) and education level (p value = 0.046). The dominant variable was the attitude with an OR value = 10.9 after being controlled by a variable of education level.

Discussion

The results of the study showed that most respondents had poor knowledge of cervical cancer before the health promotion activity, which is caused by many factors, such as limited access to health information. This is evident on the respondents' answer when asked if they have ever heard of cervical cancer. Almost all of the respondents had a negative response. The respondents also said there were no healthcare providers who visit, socialize, and provide counseling on cervical cancer.

The low education level of the respondents, most of them were elementary school graduates, affected the low intention in reading concerning health issues. This also has an impact on their low knowledge level. A study mentioned that formal education relates significantly to one's level of knowledge.[6-8] Similarly, in theory, it can be explained that knowledge is the result of human sensing or of knowing something is done by someone to the object through the senses he or she has, among them are the eyes and ears. Influential factors to knowledge include education, information media, socio-cultural and economic backgrounds, environment, experience, and age.[9]

After performing health promotion including a lecture, video playback, and leaflet and poster distribution, the analysis results in this study showed that the level of

knowledge of the respondents improved. The number of respondents with poor knowledge decreased from 29 to 11 after the health promotion. Meanwhile, the number of respondents with good knowledge increased from 6 to 24 after the health promotion. The statistical test also indicated that the health promotion activity had a significant impact on improving the respondents' knowledge of cervical cancer and early detection using the IVA method.

Better knowledge is gained through the sense of sight (eyes) as well as through direct and other people's experiences.[9] Thus, it can be understood that the health promotion activity, both as individuals and as groups, includes various ways such as counseling, demonstrating, and providing printed media, which allow for the transfer of knowledge that can impact people to increase or change their knowledge level toward the better. Therefore, health promotion activity is very effective in providing and improving the knowledge of health.[10-11] Thus, one of the ways to prevent cervical cancer is to elevate the knowledge of reproductive health, especially on cervical cancer and its detection method, which can be done through health promotion activities.[12]

Most respondents did not have the intention to take early detection of cervical cancer using the IVA method, but after the health promotion activity, almost all expressed their intention. The number of respondents with no intention to do early detection of cervical cancer decreased from 19 to 2 after the health promotion. On the other hand, the number of respondents with the intention to do so increased from 16 to 33 after the health promotion. The statistical test showed a significant effect of the health promotion activity on the respondents' intention. The results of this study indicated the existence of conformity with some previous studies.[13-14]

Health promotion activities aimed at predisposing factors are in the form of providing information due to lack of knowledge, information, description, and awareness-raising notification. The purpose of this health promotion activity can provide or increase someone's knowledge, in this case, it is the knowledge of cervical cancer and early detection efforts through the IVA method. Knowledge is a very important domain for the formation of someone's actions.[9]

After the health promotion activity, almost all of the respondents had the intention to take early detection of cervical cancer with the IVA method. The change in intention was affected by the improvement of the respondents' knowledge after the health promotion activity.[15] The improved knowledge will raise the respondents' awareness of the importance of early detection of cervical cancer. Furthermore, they belong to the group who are at risk of cervical cancer. Other than affecting the intention, good knowledge will also affect the respondents'

behavior to do early detection of cervical cancer.[16] This means that the respondents' awareness grows because of the improvement in knowledge, and this will also grow their intention to take early detection of cervical cancer in the end. Good knowledge will shape a good attitude, and a good attitude will grow intention to do good things.

The IVA is a cheap, easy to do, and very effective method to detect the presence of cervical cancer.[4] However, so far, the coverage of IVA is still low at 5.15%.[17] Several factors influence a person to do early detection of cervical cancer, but the awareness is the most important, especially among the commercial sex worker group who are highly susceptible. Therefore, it is important for the government and especially health workers to raise awareness of early detection of cervical cancer to high-risk communities such as commercial sex workers. From the results of this study, after the health promotion, the knowledge of the commercial sex workers improved and then the intention followed. Therefore, increasing the knowledge of the commercial sex workers first will improve their scope of the IVA. Once they have an intention to do early detection of cervical cancer, it should be followed up by local health workers using the IVA. It is also much better if it is performed in the localization of the commercial sex workers as they tend to be afraid to go to healthcare facilities.

Conclusion

Before the health promotion activity, 8 out of the 10 respondents have less knowledge, and almost all expressed no intention to perform early detection of cervical cancer using the IVA method. However, after the health promotion activity, more than half of the respondents show better knowledge, and almost all express their intention to do early detection of cervical cancer using the IVA method. Increasing the commercial sex workers' knowledge and intention first will improve their scope of early detection of cervical cancer using the IVA method.

Recommendation

To increase the knowledge that has an impact on the change in intention, a health promotion activity can be done at a time. But to change the attitude, the health promotion activity needs to be performed repeatedly. It requires a repeated and sustainable health promotion activity.

References

1. Rasjidi I. Epidemiologi kanker serviks. Indonesian Journal of Cancer. 2009; 3 (3): 103–8.
2. Torre LA, Bray F, Siegel RL, Ferlay J. Global cancer statistics, 2012. CA: A Cancer Journal for Clinicians. 2015; 65 (2): 87–108.
3. Kurniawan B, Asmika A, Sarwono I. Hubungan tingkat pengetahuan

dengan partisipasi pada pemeriksaan pap smear pada wanita pekerja seks komersial. Jurnal Kedokteran Brawijaya [Internet]. 2008; 24 (3): 30-38. Available from: http://jkb.ub.ac.id/index.php/jkb/article/view/169

4. Ocviyanti D. Tes PAP, tes HPV dan servikografi sebagai pemeriksaan triase untuk tes IVA positif: upaya tindak lanjut deteksi dini kanker serviks pada fasilitas kesehatan dengan sumber daya terbatas beserta analisis sederhana efektivitas biayanya. Obstetri Ginekologi Indonesia. 2007; 31: 201–11.

5. Marlia. Setiap jam seorang perempuan di Indonesia meninggal akibat kanker serviks [Internet]. Universitas Padjajaran. 2016. Available from: http://news.unpad.ac.id/?p=24107

6. Widiawaty N. Hubungan tingkat pendidikan formal dan tingkat pengetahuan wanita tentang kanker payudara dengan kejadian kanker payudara di Borokulon Banyuurip Purworejo. Jurnal Komunikasi Kesehatan. 2012; 3(2): 51-54.

7. Maulina R. Faktor-faktor yang berhubungan dengan pengetahuan tentang pap smear pada wanita usia subur di Kemukiman Lamnga Kecamatan Mesjid Raya Kabupaten Aceh Besar. Jurnal Kesehatan Masyarakat [Internet]. 2012;1(August):1–9. Available from: http://www.ejournal.uui.ac.id/jurnal/Renggalis_Maulina-8rojurnal_renggalis.pdf

8. Sulistiowati E, Sirait AM. Pengetahuan tentang faktor risiko, perilaku dan deteksi dini kanker serviks dengan Inspeksi Visual Asam asetat (IVA) pada wanita di Kecamatan Bogor tengah, Kota Bogor. Buletin Penelitian Kesehatan [Internet]. 2014; 42 (3): 193–202. Available from: https://media.neliti.com/media/publications/20081-ID-pengetahuan-tentang-faktor-risiko-perilaku-dan-deteksi-dini-kanker-serviks-denga.pdf

9. Notoatmodjo S. Promosi kesehatan dan ilmu perilaku. Jakarta: Rineka Cipta; 2003.

10. Hidayati A, Salawati T, Istiana S. Pengaruh pendidikan kesehatan melalui metode ceramah dan demonstrasi dalam meningkatkan pengetahuan tentang kanker payudara dan keterampilan melakukan sadari. Jurnal Kebidanan. 2013; 1(1): 1–8.

11. Septadina, Seta I. Upaya pencegahan kanker serviks melalui peningkatan pengetahuan kesehatan reproduksi wanita dan pemeriksaan metode IVA (Inspeksi Visual Asam Asetat) di wilayah kerja Puskesmas Kenten Palembang. Jurnal Pengabdi Sriwijaya. 2015; 3(1): 222–8.

12. Suhita B. Pengaruh health education terhadap pengetahuan dan sikap wanita dewasa tentang "sadari" dalam upaya deteksi dini Ca Mammae di Kediri [Thesis]. Surakarta: Universitas Sebelas Maret; 2008.

13. Mulyati S, Suwarsa O, Desy Arya IF. Pengaruh media film terhadap sikap ibu pada deteksi dini kanker serviks. Jurnal Kesehatan Masyarakat. 2015; 11(1): 16-24.

14. Herfanda E, Anjarwati. Pengaruh penyuluhan dan pemberian leaflet kanker serviks terhadap minat pemeriksaan pap smear ibu-ibu di Dusun Jogonalan Tirtonirmolo Kasihan Bantul [Skripsi]. Yogyakarta: Universitas 'Aisyiyah; 2015.

15. Apriani EP. Hubungan pengetahuan tentang kanker serviks dengan minat metode IVA dan pap smear pada ibu-ibu perkumpulan RT di Dukuh Gamping Kidul Ambarketawang Gamping Tahun 2013 [Skripsi]. Yogyakarta: Universitas 'Aisyiyah; 2015.

16. Dewi NMS, Suryani N, Murdani P. Hubungan tingkat pengetahuan dan sikap Wanita Usia Subur (WUS) dengan pemeriksaan Inspeksi Visual Asam asetat (IVA) di Puskesmas Buleleng I. Jurnal Magister Kedokteran Keluarga. 2013; 1(1): 57–66.

17. Wati SPD. Analisis dan implementasi program deteksi dini kanker serviks dengan IVA test [Internet]. Jakarta: Direktorat Pencegahan dan Pengendalian Penyakit Tidak Menular, Kementerian Kesehatan; 2017. Available from: http://p2ptm.kemkes.go.id/kegiatan-p2ptm/jawa-barat/analisis-dan-implementasi-program-deteksi-dini-kanker-serviks-dengan-iva-test-pusat-pembiayaan-kesehatan-jaminan-kesehatan-nasional-jkn-kemenkes-ri-tanggall-25-dan-26-september-2017