

ORIGINAL ARTICLE:**Knowledge and behavior of Indonesian general practitioners on cervical cancer early detection****Laila Nuranna¹, Nesyah Fatahan², Alfu Nikmatul Laily², Gatot Purwoto¹**¹Department of Obstetrics and Gynecology, Faculty of Medicine, Universitas Indonesia Cipto Mangunkusumo Hospital, Indonesia, ²Female Cancer Program, Cipto Mangunkusumo Hospital, Salemba Raya Street, Indonesia.**ABSTRACT**

Objective: Outline the correlation between cervical cancer-related knowledge and voluntary enrollment on early detection of cervical cancer.

Material and Methods: Cross sectional design was performed. The inclusion is general practitioner women which currently married. Knowledge and behavior were assessed using questionnaire.

Results: Among 367 respondents who filled the questionnaire, 77.4% of them (284) satisfy the inclusion criteria. 56% has high knowledge, and 42.3% has adequate knowledge. Moreover, 62.7% subjects ever performed cervical cancer early detection to themselves; 39.8% with VIA (visual inspection with acetic acid) and 46.5% with Papsmear and/or HPV DNA. Proportion of no early detection history with low and adequate knowledge 1.9 and 1.5 times simultaneously higher than proportion of no early detection with high knowledge. There is no significant correlation between level of knowledge and early detection history.

Conclusion: There was no significant correlation between the level of knowledge and voluntary enrollment for early detection of cervical cancer for general practitioners in Indonesia.

Keywords: Behavior; general practitioner; knowledge; early detection.

ABSTRAK

Tujuan: Mengetahui hubungan pengetahuan dan perilaku sadar deteksi dini kanker serviks pada dokter umum Indonesia

Bahan and Metode : Design penelitian adalah cross sectional. Kriteria inklusi adalah dokter umum perempuan yang telah menikah. Pengetahuan dan perilaku dinilai menggunakan kuisioner.

Hasil: Diantara 367 responden yang telah mengisi kuisioner, 77,4% diantaranya (284) masuk dalam kriteria inklusi. Sebanyak 56% memiliki tingkat pengetahuan baik dan 42,3% memiliki tingkat pengetahuan sedang. Selanjutnya, 62,7% responden telah mengikuti pemeriksaan deteksi dini kanker serviks untuk dirinya sendiri; 39,8% dengan metode IVA (Inspeksi visual dengan asam asetat) dan 46,5% dengan papsmear dan/atau HPV DNA. Proporsi responden dengan riwayat tidak melakukan deteksi dini kanker serviks yang memiliki tingkat pengetahuan rendah dan sedang adalah 1,9 kali dan 1,5 kali lebih tinggi dibanding proporsi responden dengan riwayat tidak melakukan deteksi dini kanker serviks pada kelompok responden berpengetahuan baik. Tidak ada hubungan yang bermakna antara tingkat pengetahuan dengan riwayat melakukan deteksi dini kanker serviks.

Simpulan: Tidak ada hubungan bermakna antara tingkat pengetahuan dengan riwayat perilaku sadar deteksi dini kanker serviks pada dokter umum di Indonesia.

Kata kunci : perilaku; dokter umum; pengetahuan; deteksi dini

***Correspondence:** Laila Nuranna. Department of Obstetrics and Gynecology, Faculty of Medicine Universitas Indonesia Cipto Mangunkusumo Hospital, Salemba Raya Street No. 6, 10430 Indonesia. laila.nuranna@ui.ac.id

pISSN:0854-0381 • eISSN: 2598-1013 • doi: <http://dx.doi.org/10.20473/mog.V28I12020.20-23>

• Maj Obs Gin. 2020;28:20-23 • Received 26 May 2019 • Accepted 15 Nov 2019

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INTRODUCTION

Cancer often become the main culprit of world's mortality cause; ranked as fourth deadliest cancer in the world.^{1,2} In Indonesia, cervical cancer recorded as the second cancer with highest mortality after breast cancer on 2018.³ However, this condition is completely different with several of developed countries', for instance in Britain who had significant decrease of this invasive disease of 35% on 1995 after its 85% screening coverage.⁴ This happened for a sets of reason; low awareness of citizen, limited screening coverage, low diagnose service and lack of national cancer registration.⁵

The ethiology of cervical cancer is reliably known therefore could be prevented through early detection.⁶ Among several early detection methods, VIA (Visual Inspection with Acetic Acid) regarded as one propounding method for low and middle income countries like Indonesia.⁷

During 2008-2018 the prevalence of cervical cancer is stagnantly high and relatively increasing.⁸ In short, aforementioned early detection efforts is currently incapable in reducing the high number of cervical cancer prevalence in Indonesia. According to Basic Health Survey 2018, only 3% women at risk have been screened using VIA method which accumulated from 2014-2017. Moreover, in Jakarta as the capital city in Indonesia, only achieve 6.3% coverage of screening with VIA.⁹

In Indonesia, general practitioner become one of health professional to perform VIA and cryotherapy if the VIA result is positive.¹⁰ They are expected to disseminate the information to community and become the role model. However, current study is abstinence in highlighting this issue. Thus, this study has objective to know the correlation between knowledge and behavior of general practitioners related with cervical cancer detection in Indonesia.

MATERIALS AND METHODS

The subjects of this study are general practitioners(GPs) who attended cryotherapy simulation in November 2018. The inclusion of this study is GP women which currently married. This study used cross-sectional design to assess the level of knowledge and voluntary enrollment for early detection of cervical cancer in Indonesia. The ethical clearance was issued by The Ethics Committee of Faculty of Medicine Universitas Indonesia. There were 284 subjects who satisfy the inclusion criteria. For data collection, structured

questionnaire was prepared to collect the data. The scoring knowledge was divided into 3 groups; low (≤ 60), adequate (61-80), high (≥ 80). For data analysis, by means of SPSS, bivariate analysis was performed to assess the correlation between variables. Prevalence ratio with confidence interval 95% and it will be categorized as significant with $P < 0.05$.

RESULTS AND DISCUSSION

Sociodemography

Among 367 respondents who filled the questionnaire, 77.4% of them (284) satisfy the inclusion criteria (woman and married). All subject are general practitioners with 57% of them has 1-5 years working experience. Furthermore, 80.6% of the subject has finished the training of cervical cancer early detection training. The province of subjects who finished the training distribution from almost all region. The highest percentage of subject enrolling this study come from Central Java (18%), while 2 provinces (North Sulawesi and Bali) is absent in providing subjects for this study.

Cervical cancer knowledge

From 284 subjects, 56% of them have high level of cervical cancer knowledge and 1.7% has low knowledge level. The cause of cervical cancer was known to 100% of subjects, 88.7% knew that risk factor of cervical cancer. Furthermore, 73.6% knew several methods for early detection. In this study, 62.7% subjects ever administered cervical cancer early detection; 39.8% with VIA and 46.5% with Papsmear and/or HPV DNA.

Proportion of no early detection history with low and adequate knowledge 1.9 and 1.5 times simultaneously higher than proportion of no early detection with high knowledge. There is no significant correlation between level of knowledge and early detection history (Table 1).

Proportion of no VIA history with low and adequate knowledge 2.9 and 1.2 times simultaneously higher than proportion of no early detection with high knowledge. There is no significant correlation between level of knowledge and VIA history (Tabel 2). In this study, 159 subjects (56%) already has high level of knowledge related with cervical cancer early detection, although this result is low if compared to similar study from South Ethiopia and Nigeria which 86.9% and 80.9% of their subjects has high level knowledge.^{11,12} This result is relatively similar with a study from West Africa which 55.7% of its subject has right understanding about cervical cancer.¹³

Table 1. Comparison of knowledge and early detection history

Variable	Early Detection History				Total N	Total %	PR (95% CI)	P-value
	No	%	Yes	%				
Knowledge								
Low	3	60	2	40	5	100	1.988	0.175
Adequate	55	45.8	65	54.2	119	100	1.518	0.07
High	48	30.2	111	69.8	159	100	1	

Tabel 2. Comparison of knowledge and VIA history

Variable	VIA History				Total N	Total %	PR (95% CI)	P-value
	No	%	Yes	%				
Knowledge								
Low	4	80	1	20	5	100	2.913	0.4
Adequate	75	62.5	45	37.5	120	100	1.214	0.461
High	92	57.9	67	642.1	159	100	1	

These differences and similarity could happen because of variation of subjects characteristic between studies. In this study, all subject are general practitioners and therefore has same trait with West Africa; midwives that has obligation in the first line to perform cervical cancer early detection, unlike in South Ethiopia that has vast variation of health professional, for instance general practitioner, midwife, pharmacist, and health office staff. Moreover, the differences of questions could be the other factor. In this study, the questions focused on VIA methods and lesion immediate therapy that have not been investigated in the previous studies. However, these aspects still emphasized recalling that national early detection program in Indonesia is using it through its see and treat in single visit approach.¹⁴

In this study, 62,7% subjects have performed early detection through VIA or Papsmear or HPV DNA. This number is relatively high if compared with research from Côte d'Ivoire (West Africa), Uganda¹⁴, and Republic of Korea¹⁵ which only procured 18.4%, 19% and 13% in a row. Furthermore, Mutyaba et al reported that this low proportion possibly because of the feeling of immunity since they understand about the ethiology as professional health worker.¹⁴ However, Tran et al stated that this low proportion because of faulty of country policy that only allows women with symptoms to be screened.¹⁵ Then, we found that 39.8% has done screening in patients with VIA and 46.5% with Papsmear or HPV DNA. The latter is higher probably because Papsmear and HPV DNA is introduced first in Indonesia before VIA.

The coverage of Papsmear and HPV DNA is higher compared with VIA might be because the subjects of this study are general practitioners who relatively has middle-high income thus could afford the expensive screening method. But Papsmear and HPV DNA are not

suitable for national program in Indonesia since the distribution of resources in each province is different.¹⁶

This study could be considered has adequate novelty in Indonesia, recalling that it gathered data nationally from general practitioner to be assessed in their knowledge and early detection -related behavior. Almost all provinces in Indonesia have represented through this study (94%) embedded with full or lack of resources to perform early detection, thus could be stated that this study is reliable in providing data of situation early detection of cervical cancer in Indonesia, particularly in knowledge and behavior. However, the weakness of this study including the unbalanced of proportion in representing each province.

The last highlight, after bivariate analysis was done on the correlation of knowledge and practice in enrolling self to early detection, it showed that subjects with low and adequate knowledge has 1.9 and 1.5 times lower proportion than subjects with high knowledge. Moreover, specifically in VIA, the subjects with low and adequate knowledge has 2.9 and 1.2 times lower proportion to enroll themselves in VIA test. Although not significant, it could be rudimentary indication that the higher the knowledge the more possibility for someone to enroll herself in early detection program. Furthermore, although VIA has become the stipulated national program in the past decade, but the practice is not satisfactory. Thus, the knowledge regards it should be strengthened to achieve satisfactory practices.

Behavior of health workers, particularly in general practitioner to enroll themselves in early detection; projected could have significant effect in pulling the society to follow their path. Not only give the theoretical aspects, they could elaborate their experiences and explain their feelings to society.

CONCLUSION

There was no significant correlation between the level of knowledge and voluntary enrollment for VIA test for general practitioners in Indonesia. However, there was an inclination that low VIA-knowledge will result on lower VIA enrollment by two times, if compared with high level knowledge.

ACKNOWLEDGMENTS

This study was supported by the Faculty of Medicine Universitas Indonesia, Cipto Mangunkusumo Hospital, and Indonesian Health Ministry. We would like to thank our colleagues from the Division of Gynecologic Oncology for providing input and further expertise for this study. The authors did not receive any specific grant from any funding agency in the public, commercial, or nonprofit sectors.

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