Direct Experience with Cervical Cancer Patient, Husband Support, and Self-Perception as Determinant Factors of Women's Desire to Take VIA Screening Test

Pengalaman Langsung dengan Penderita Kanker Serviks, Dukungan Suami dan Persepsi Diri sebagai Faktor Penentu Keinginan Perempuan Melakukan Skrining IVA

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Abstract

Cervical cancer causes 10.3% women mortality in Indonesia. Visual Inspection of Acetic Acid (VIA) had been used for screening program since 2014, but only 2.45% women took the test in 2015. In the place of this study, the coverage was at less than 1%. Previous studies revealed that psychosocial was an important factor, but less studies analyzed the role of husband support and direct experience with cervical cancer patient. The aim of the study was to learn correlation between direct experience with cervical cancer patient, husband support, self-perception and women's desire to take VIA screening. Cross-sectional study was applied randomly on women aged 25-55 years old at four villages in Yogyakarta. All data were taken by questionnaire. Most of 188 respondents had right perception of cervical cancer and the importance of VIA, but they did not receive adequate support from their husband. Few of them had direct experience with cervical cancer patient. Statistical results showed that age, right perception and husband support were correlated with women's desire to take VIA test (p value< 0.05), while direct experience with cervical cancer patient was not correlate. Women with right perception and husband support are more willing to take VIA test.

Keywords: Direct experience, husband support, self-perception, VIA

Abstrak

Kanker serviks menyebabkan 10.3% kematian pada perempuan di Indonesia. Inspeksi visual asam asetat (IVA) telah digunakan untuk program skrining sejak tahun 2014 tetapi hanya 2,45% perempuan yang melakukan pemeriksaan pada tahun 2015. Di tempat penelitian, cakupan skrining metode IVA kurang dari 1%. Penelitian sebelumnya menyebutkan faktor psikososial sebagai satu faktor penting, tetapi sedikit penelitian yang menganalisis peran dukungan suami dan pengalaman langsung dengan penderita kanker serviks. Penelitian ini bertujuan mempelajari hubungan antara pengalaman langsung dengan penderita kanker serviks, dukungan suami, persepsi diri dan keinginan perempuan melakukan skrining IVA. Penelitian potong lintang dilakukan secara acak pada perempuan berusia 25-55 tahun di empat kelurahan di Yogyakarta. Seluruh data dikumpulkan melalui kuesioner. Sebagian besar dari 188 responden memiliki persepsi yang benar mengenai kanker serviks dan pentingnya pemeriksaan IVA, tetapi mereka tidak menerima dukungan yang cukup dari suami. Sebagian kecil memiliki pengalaman langsung dengan penderita kanker serviks. Uji statistik menunjukkan bahwa usia, persepsi yang benar, dan dukungan suami berhubungan dengan keinginan perempuan untuk melakukan skrining IVA (nilai p < 0.05), sedangkan pengalaman langsung dengan penderita kanker serviks tidak berhubungan dengan keinginan melakukan skrining. Perempuan dengan persepsi yang benar dan dukungan suami lebih bersedia melakukan skrining IVA.

Kata kunci: Pengalaman langsung, dukungan suami, persepsi diri, IVA

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Introduction

Cervical cancer causes 10.3 % women mortality in Indonesia, but it could be detected by screening method.^{1,2} World Health Organization (WHO) recommends comprehensive program to prevent the morbidity and mortality including Human Papiloma Virus (HPV) vaccination and screening to detect the disease earlier by Visual Inspection of Acetic Acid (VIA) test.^{3,4} VIA test has several benefits compared to papsmear i.e. simple, reasonable price, and high sensitivity.^{5,6} The Indonesian Government adopted VIA since 2014, but the coverage is still low in 2015 at 2.45%.⁷ In the Special Region of Yogyakarta Province with the highest cancer prevalence in Indonesia and as the study place, the percentage of VIA test is even less than 1%.^{8,9}

Previous studies in eastern countries including in Indonesia, psychosocial was one of the important barriers for women to take a part on VIA test, especially factors related to their feelings i.e. concern, trust, fear, etc.^{10, 11} Wong, *et al.*,¹² revealed that direct contact with cancer patients (family, relatives and friends) makes them more afraid of taking the test.

Husbands in eastern countries especially in Yogyakarta, where the study took place, had a dominant role in their wives' life including health. Most of women rely on their husband's policy and salary in a family. Therefore, in this study, husband support was also evaluated on women's desire to take VIA test.¹³ In Indonesia, there were limited studies focusing on husband support and direct experience of healthy women with cervical cancer patients.

Therefore, the aim of this study was to learn correlation between direct experience with cervical cancer patient, husband support, self-perception of cervical cancer, and women's desire to take VIA test.

Method

The study was approved by the ethics committee of Faculty of Medicine Universitas Airlangga Number 87/EC/KEPK/FKUA/2017. Each participant was asked to sign informed consent after the information on this study was delivered. Women aged 20-55 years, living at 4 villages in Yogyakarta City with the large population of 4,323 women were selected randomly based on inclusion criteria i.e living more than 1 year in the area, not having cervical cancer (by direct interview or their health check card), married, and willing to be a respondent. The large of sample was calculated by lemeshow formula as many as 188 women. Samples were taken by cluster random sampling. One district would be taken randomly in Yogyakarta City as the location ofstudy. As many as 47 respondents of each village as the cluster in this district would be taken. Data were collected in January-March 2017 by questionnaire.

Characterictics (age, parity, employment status, economic status and education level), self-perception, direct experience with cervical cancer patient and husband support (giving advice, reminding VIA test schedule, giving motivation, providing cost, accompanying to health facilities or providing transportation and giving appreciation after taking test) were asked and analyzed using SPSS 16 to evaluate the association (chi-square test, Mann Whitney, and fisher exact). Significance was set at p value less than 0.05. Multivariate analysis was used in this study using logistic regression.

Results

There were 108 (57%) of 188 respondents who had desire to take VIA test. Table 1 shows characteristics of respondents and the desire to take VIA test. Most of them were unemployed women, had low to middle socio economic level, and graduated from high school. Age was associated with women's desire to take VIA test, while other characteristics were not associated.

Table 2 indicates that most women had right perception of cervical cancer and the importance of VIA test. They understood and agreed that cervical cancer led to mortality, having more than one sex partners had a risk to get the disease. VIA test was beneficial to screen cervical cancer even without symptoms and they did not feel shame to take the test. The result of fisher exact test showed that perception of cervical cancer lead to women death, having more than one sex partners had a risk to get the disease, VIA test was beneficial to screen cervical cancer. VIA test was important even without symptoms and women did not feel shame to take the test associated with women's desire to take VIA test (p value= 0.010; 0.015; 0.001; 0.001; 0.001 respectively). From this table, there were no barrier for respondents to take VIA test as shown in the percentage of those who chose "yes" compared to "no" option for the desire.

Table 3 indicates that few respondents had direct experience with cervical cancer patients (family, friends, neighbours). Of 188 respondents, only 27% of them had direct experience contact with cervical cancer patients. Cervical cancer patients share about the journey of cervical cancer (since they first know until get treatment) and their feeling (sad, painful and hopeless) to a family, relatives or friends. There was no association between the experience and women's desire to take VIA test (chi-square test, p value > 0.05).

Husband support (giving advice, giving motivation, reminding the test schedule, providing the cost, accompanying to health facilities, giving appreciation after test) to take VIA test was low as reported by the respondents (Table 4). Chi-square test revealed that all the components of husband support were associated to women's desire to take VIA test (p value = 0.001; 0.002; 0.007;

	Category	Interventi	on Group	Contr		
Variable		n	%	n	%	p Value
Age	20-24 years	4	13.3%	5	16,7%	0.623
0	25-29 years	14	46.7%	17	58.7%	
	30-34 years	7	23.3%	6	20.0%	
	35-39 years	5	16.7%	2	6.7%	
Education level	Junior high school	4	13.3%	6	20.0%	0.753
	Senior high school	22	73.3%	21	70.0%	
	Higher education	4	13.3%	3	10.0%	
Occupation	Employee	2	6.7%	7	23.3%	0.180
-	Housewife	18	60.0%	16	53.35%	
	Self-employed	10	33.3%	7	23.3%	

Table 1. Characteristics of Respondents

Table 2. Association between Self-Perception and Women's Desire to Take VIA Screening Test

		Women's E	est			
Self-Perception	Category	Yes			No	p Value
		n	%	n	%	
Cervical cancer leads to women death	Strongly agree	60	32	32	17	0.010
	Agree	45	24	37	19.7	
	Neutral	1	0.5	8	4.3	
	Disagree	1	0.5	2	1	
	Strongly disagree	1	0.5	1	0.5	
Having more than 1 sex partners will cause cervical cancer	Strongly agree	60	32	26	13.8	0.015
	Agree	33	17.6	40	21.2	
	Neutral	7	3.7	6	3.2	
	Disagree	7	3.7	8	4.3	
	Strongly disagree	1	0.5	0	0	
VIA test is beneficial to screen cervical cancer	Strongly agree	48	25.6	16	8.5	0.001
	Agree	51	27.1	43	22.8	
	Neutral	7	3.7	16	8.5	
	Disagree	1	3.7	5	2.7	
	Strongly disagree	1	0.5	-	0	
VIA test is important for women with no symptoms	Strongly agree	48	25.6	9	4.8	0.001
vir eest is important for women with no symptoms	Agree	47	25	35	18.6	0.001
	Neutral	8	4.3	22	11.7	
	Disagree	4	2.1	13	6.9	
	Strongly disagree	1	0.5	1	0.5	
Women do not feel shame/afraid of taking VIA test	Strongly agree	44	23.4	15	7.9	0.001
women do not reel shame/arraid of taking via test	Agree	44	23.4	21	11.2	0.001
	Neutral	2	1.2	17	9.0	
	Disagree	17	9.0	24	12.8	
	Strongly disagree	17	9.0 0.5	24	12.8	
VIA test peeds long time	Strongly agree	13	0.5	12	1.0 6.4	0.038
VIA test needs long time	Agree	13	11.7	23	0.4 12.2	0.038
	Neutral	22	11.7	23	12.2	
			23.4	22		
	Disagree	44		25	12.2	
	Strongly disagree	7	3.7		0	

Notes:

n = Number of Sample

0.001; 0.002; 0.003, respectively).

Discussion

Table 5 displays that age had 1.084 times for the desire of screening VIA test with positive association, although the differences in age group could not be known with this statistical test. Age was correlated with women's desire to take VIA screening test, while other demographic variables were not. The previous studies by Soneji, *et al.*,¹⁴ and Neube, *et al.*,¹⁵ mentioned that age was correlated with women's

	Women	est Screening			
Direct Experience with Cervical Cancer Patient		Yes N		No	p Value
	n	%	n	%	
28	31	16.5%	20	10.5%	0.153
0	77	41%	60	32%	

Table 3. Association between Direct Experience with Cervical Cancer Patient and Women's Desire to Take VIA Screening Test

Notes:

n = Number of Sample

Table 4. Association between Husband Support with Women's Desire to Take VIA Screening Test

		Women's Desire to Take VIA Screening Test				
Husband Support	Category	Yes		No		p Value
		n	%	n	%	
Giving advice to take VIA test	Yes	37	19.7	11	5.9	0.001
	No	71	37.8	69	36.6	
Giving motivation to take VIA test	Yes	31	16.5	8	4.3	0.002
	No	77	41	72	38.2	
Reminding VIA test schedule	Yes	33	17.6	11	5.9	0.007
-	No	75	39.9	69	36.6	
Providing VIA test cost	Yes	60	31.9	19	10.1	0.001
-	No	48	25.6	61	32.4	
Accompanying women to health facilities	Yes	60	31.9	26	13.8	0.002
providing transportation cost	No	48	25.6	54	28.7	
Giving appreciation after VIA test	Yes	24	12.8	5	2.7	0.0034
- · · ·	No	84	44.7	75	39.8	

Notes:

n= Number of Sample

Table 5. Association between Characterictics, Self-Perception and Husband Support with Women's Desire to Take VIA Screening Test

Variable	ß	SE	Wald	p Value	Exp(β)	95% CI	
Variable	β					Lower	Upper
Husband givs money	-0.996	0.372	7.182	0.007	0.369	0.178	0.765
Age	0.043	0.019	5.210	0.022	1.044	1.006	1.084
Women do not feel shame/afraid of taking VIA test	-0.606	0.170	12.753	0.000	0.545	0.391	0.761
VIA test is important for women with no symptoms	-0.816	0.207	15.550	0.000	0.442	0.295	0.664
VIA test needs long time	-0.421	0.168	6.272	0.012	0.656	0.472	0.913

Notes:

SE = Standard Error; CI= Confidence Interval

participation to take VIA test. Previous study said that women aged less than 45 years old had greater possibility than to those aged more than 45 years to take VIA test, while other studies revealed that women aged more than 50 years old had greater possibility to take VIA test compared to women aged 40-49 years.¹⁶⁻¹⁸ The young women were likely to take cervical cancer screening than the older women, although women aged 35-55 years are more susceptible to this disease (2-3 times).^{15,19} In addition to age, parity and socio economic were the risk factors of cervical cancer disease. According to other studies, women with parity 0-2 were more likely to take VIA test compared to women with parity 5 or more although they knew that their parity status was at risk.^{7,19}

Socioeconomic status was related to family welfare especially on health, and it had been linked with both health status and health behavior.^{20,21} Women with low socioeconomic status could not have more access to get screening despite having more than 5 times to get cervical cancer due to cost.^{17,22} Economic status had impact on

women's desire to take VIA screening test, and women with lower income were more likely to take screening compared to women with middle or upper income.^{15,17} Women with independent finance had more access to cervical cancer screening compared to women who depended the finance on their husband.²³ Women graduated from high school or university tend to do screening (1.94 times) compared to women with elementary education level (1.81 times).^{16,17} Strong education was important in both navigating health care and making choice about lifestyle and personal health behaviors.²⁴ If women knew the risk (aged 35-55 years, parity 5 and low socioeconomic status), women desire more to take screening. Diverse demographic i.e age, parity, education level, sociopsychological and structural variables (knowledge) might influence the perception of the disease, self-risk, barrier and the importance of screening, thus indirectly it influenced health-related behavior.²¹

Modifying factors would affect women's perception i.e perceived susceptibility to and severity of disease, perceived severity, perceived benefit and perceived barrier with women's desire to take VIA test by individual trust.²¹ People who found cancer disease as a severe illness could produce a fear inside themselves, therefore, they owned to be reluctant to do early screening.²⁵ In this study, most women had right perception and it was associated with women's desire to take the test. Individuals who consider themselves susceptible to a condition believe that risk of their condition is to be a serious consequence, they tend to take actions that will be beneficial in reducing risk and severity and believe that these actions can prevent them from the disease since early.²¹

Direct contact with cervical cancer patient was not correlated with women's desire to take VIA test because other factors played bigger role. The involvement of cervical cancer patients was not needed although the presence of cervical cancer patients in community could give evidence and motivation. This result is different with previous study that women with family records of cervical cancer and see the death because of the disease are more possible to do screening.^{15,16,26} Pattern of individual feeling was greatly affected by direct experience between individuals throughout their life and various experience.²⁷ Social act affects changes in feeling and life pattern of individuals as changes of the perceived, emotion and, knowledge.¹³ Sick people changed their role on family and community environment because of body system, self-image, and communication needs.²⁸

Husband support strongly affected the women's desire in this study because women were treated as socially inferior. Although women had right perception of disease and health care, they depended on husband support. This dependence not only needed material, but also all of types of husband associated with women's desire to take VIA test i.e giving advice, giving motivation, reminding the test schedule, providing cost, accompanying or providing transportation cost and giving appreciation. Husband support helped his wife solve pressure and effect about their health status and clinical assessment by direct path shown on health belief model theory.^{21,29} Women who had support from their husband were more likely to take screening by 3.05 times compared to women who did not have support from their husband.^{30,31} The problem addressed the involvement and participation from men, but this case was very inadequate because women's health was imposed for their self-awareness-culture, economic factor, and knowledge.³²⁻³⁴

Conclusion

Age, self-perception of cervical cancer and husband support are correlated with women's desire to take VIA test. Reproductive women in this study have low husband support to take VIA test, and unfortunately, the support relates to women's desire to take VIA test (giving advice, giving motivation, reminding the test schedule, providing the test cost, accompanying to health facilities or giving transportation cost and giving appreciation), while the women already have strong self-perception. Hence this study recommends to involve husband on health promotion and gives attention to women's age. Then a further study on the effectivity of counseling with husband support should be conducted.

References

- World Health Organization. Cancer country profiles. Geneva : World Health Organization Press; 2014 [updated 2014; cited 2016 Oct 15]. Available from : http://who.int>country-profiles>idn_en.
- National Cervical Cancer Coalition. Cervical cancer overview-what is cervical cancer? North Carolina: Research Triangle Park nc 27709; 2011. Available from : http://www.nccc-online.org/hpvcervical-cancer/cervical-cancer-overview/
- World Health Organization. Prevention and control of cervical cancer. Geneva : World Health Organization Press; 2014. Available from : http://who.int>topics>cancers.
- Rasjidi I. Epidemiologi kanker pada wanita. Jakarta: Ikatan Penerbit Indonesia; 2010.
- Bhattacharyya AK, Nath JD, Deka H. Comparative study between pap smear and visual inspection with acetic acid (VIA) in screening of CIN and early cervical cancer. Journal of Mid-Life Health. 2015: 6 (2):53-8. Available from : http://www.ncbi.nlm.gov/pmc/articles/ PMC4481740/#_ffn_sectitle
- El Sokkary HH. Comparison between pap smear and visual inspection with acetic acid in screening of premalignant cervical intraepithelial lesion and subclinical early cancer cervix. International Journal of Reproduction, Contraception, Obstetrics and Gynecology. 2016; 6(1): 54-9. Available from: www.ijrcog.org/index.php/ijrcog/article/ view/632

- Sabrida H. Peranan deteksi dini kanker untuk menurunkan penyakit kanker stadium lanjut. Buletin Jendela Data dan Informasi Kesehatan. 2015; Semester 1; 16-24.
- Dinas Kesehatan Yogyakarta. Profil kesehatan Kota Yogyakarta. Yogyakarta: Dinas Kesehatan Yogyakarta; 2015.
- Badan Penelitian dan Pengembangan Kesehatan Kementerian Kesehatan Republik Indonesia. Riset kesehatan dasar 2013. Jakarta: Badan Penelitian dan Pengembangan Kesehatan Kementerian Kesehatan Republik Indonesia; 2013.
- Iskandarsyah A. Psychosocial and cultural reasons for delay in seeking help and non-adherence to treatment in Indonesian Women with breast cancer : A Qualitative Study. Pubmed. 2013; 33(3); 214-21. Available from: http://www.ncbi.nlm.nih.gov/pubmed/23339645
- Hajializadeh K, Ahadi K, Jomehri F, Rahgozar M. Psychosocial of bariers to cervical cancer screening among Iranian Women: the role of attachment style and social demographic factors. PubMed Central. 2013; 54(4); 218-22. Available from : https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4718322/
- Wong LP, Wong YL, Low WY, Khoo EM, Shuib R. Cervical cancer screening attitudes and beliefs of malaysian women who have never had a pap smear: a qualitative study. Pubmed. 2008; 15(4); 289-92. Available from: https://www.ncbi.nlm.nih.gov/pubmed/19005928
- Rianto. Kajian hukum secara sosiologis. Jakarta: Ikatan Penerbit Indonesia; 2012.
- Soneji S, Fukui N. Socioeconomic determinants of cervical cancer screening in Latin America. PubMed Central. 2013; 33(3); 174-82. Available from : https://www.ncbi.nlm.nih.gov/pmc/articles/ PMC3724344/
- Ncube B, Bey A, Knight J, Bessier P, Jolly PE. Factors associated with the uptake of cervical cancer screening among women in Portland, Jamaica. Pubmed. 2015; 7(3); 104-17. Available from : https://www. ncbi.nlm.nih.gov/pubmed/25839002
- 16. Yao, J, Suang L, RU Y, Zhou H, Xiang Q, Hu T. Knowledge about cervical cancer and barriers of screening program among women in Wufeng Country, a High-Insidence Region Of Cervical Cancer in China. Public Library of Science. 2012; 7(7); 1-7. Available from : http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0067005
- Kahesa C, Kjaer S, Mwaiselage J, Ngoma T, Tersbol B, Dartel M. Determinants of acceptance of cervical cancer screening in Dar es Salaam, Tanzania. Pubmed BioMed Central [Open Access Journal]. 2012; 19(12); 1-4. Available from https://www.ncbi.nlm.nih.gov/ pubmed/23253445
- Cunningham MS, Skrastins E, Fitzpatrick R, Jindal P, Oneko O, Yeates K, et al. Cervical cancer screening and HPV vaccine acceptability among rural and urban women in Kilimanjaro Region, Tanzania. BioMed Journal Open. 2015; 5(3): 1–10.
- Aminati. Cara bijak menghadapi dan mencegah kanker leher rahim/ serviks. Yogyakarta: Brilliant Book; 2013.
- Loppies IJ, Pandu ME. Hubungan pendidikan formal perempuan dengan tingkat kesejahteraan keluarga di Desa Tulehu Kecamatan Salahutu Kabupaten Maluku Tengah [thesis]. :1–16. Available from: http://pasca.unhas.ac.id/
- Glanz K, Rimer BK, Viswanath K. Health behavior and health education: theory, research, and practice [Internet]. Wiley: Jossey - Bass.

United States of America; 2008. 465-485 p. Available from: http://riskybusiness.web.unc.edu/files/2015/01/Health-Behavior-and-Health-Education.pdf#page=503

- Rustgi SD, Doty MM, Collins SR. Women at risk: why many women are forgoing needed health care. An analysis of the Commonwealth Fund 2007 Biennial Health Insurance Survey. Commonwealth Fund. 2009; 52: 1–12.
- Mupepi SC, Sampselle CM, Johnson TRB. Knowledge, attitudes, and demographic factors influencing cervical cancer screening behavior of Zimbabwean women. Journal of Women's Health [Internet]. 2011;20(6):943–52. Available from: http://www.liebertonline.com/ doi/abs/10.1089/jwh.2010.2062
- 24. Agency for Healthcare Research and Quality. Understanding the relationship between education and health: a review evidence and an examination of community perspective-agency for healthcare research and quality. [2015 September 16]; [about 10p]. Available from http://www.ahrq.gov/professionals/education/curriculumtools/population health/zimmerman.html
- 25. Were E, Nyaberi Z, Buziba N. Perceptions of risk and barriers to cervical cancer screening at Moi Teaching and Referral Hospital (MTRH), Eldoret, Kenya. Pubmed. 2011; 11(1); 58-64. Available from https://www.ncbi.nlm.nih.gov/pubmed/21572858
- 26. Akbari F, Shakibazadeh E, Pourreza A, Tavafian SS. Barier and facilitating factor for cervical cancer screening : a qualitative study from Iran. Iran Journal Cancer. 2010;3(4);178-84. Available from http://journals. sbmu.ac.ir/cp/article/viewFile/2448/2233
- 27. Dariyo A. Psikologi perkembangan dewasa muda. Jakarta: Grasindo; 2010.
- 28. Hajarrahma A, Supriyono Y, Herani I. Pengungkapan diri pada penderita kanker serviks [Internet]. Brawijaya University. March 2014 [2016 November 3]; 1(1); [15.]. Available from http://psikologi.ub.ac.id/old/ wp-content/uploads/sites/3/2013/10/JURNAL-PENGUNGKAPAN-DIRI-PADA-PENDERITA-KANKER-SERVIKS1.pdf
- Documet P, Bear TM, Flatt JD, Macia L, Trauth J, Ricci EM. The association of social support and socioeconomic status with breast and cervical cancer screening. Health Education and Behavior [Internet]. 2015;42(1):55–64. Available from: http://www.ncbi.nlm.nih.gov/pubmed/25394824%5Cnhttp://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=PMC4526257%5Cnhttp://journals.sagepub.com/doi/10.1177/1090198114557124%5Cnhttp://www.pubmedcentral.nih .gov/articlerender.fcgi?artid=4526257&tool=pmcentrez&rend
- Linadi KE. Dukungan suami mendorong keikutsertaan pap smear pasangan usia subur (PUS) di perumahan pucang gading semarang. Jurnal Kesehatan Reproduksi. 2013; 4(2): 61–71.
- 31. Wahyuni S. Faktor-faktor yang mempengaruhi perilaku deteksi dini kanker serviks di kecamatan ngampel Kabupaten Kendal Jawa Tengah. Jurnal Keperawatan Maternal [Internet]. 2013; 1(1): 55–60. Available from: http://jurnal.unimus.ac.id/index.php/JKMat/article/view/ 933/985
- Nursih I, Rahmawati R, Yulianti R. Study of men concern on women's reproductive health in Ranjeng Village. Jurnal LPPM: Jurnal Penelitian Ilmu-Ilmu Sosial dan Eksakta. 2012; 1(1); 3. Available from: http://jurnal.untirta.ac.id/index.php/jlppm/article/view/179
- 33. Perkumpulan Keluarga Berencana Indonesia. Gender dalam kesehatan

Kesmas: National Public Health Journal, 2018; 13 (1): 36-42

reproduksi. Yogyakarta: Perkumpulan Keluarga Berencana Indonesia; 2016 [updated 2016 July; cited 2017 March 27]. Available from: http://www.pkbi-diy.info/?p=4624 2016

 Hidayan IM. Men's role on family's reproductive health [Research Report]. Depok: Universitas Indonesia; 2012. Available from : Indonesialib.ui.ac.id/file?file=pdf/abstrak-76260.pdf