



Influencing Factors of Mother's Behavior In Early Detection of Cervical Cancer by VIA Method

Original Research

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Abstract

Introduction: Cervical cancer can be prevented by screening, namely by Visual Inspection Acetic Acid (VIA).

Objective: This study aims to determine the influencing Factors of Mother's Behavior In Early Detection of Cervical Cancer by VIA Method.

Methods: This study uses a descriptive correlation method with a cross-sectional approach. The sampling technique is accidental sampling. The sample size is 98 respondents. The measuring instrument used is a questionnaire to determine the the influencing Factors of Mother's Behavior In Early Detection of Cervical Cancer by VIA Method at the Simpang Tiga Pekanbaru Health Center. The analysis used is the chi-square test.

Results: The majority of the 98 respondents were between 20-35 years old, had secondary education (77.6%), unemployed 82.7%, did not do VIA 63.3%, low knowledge (61.2%), stated that the role of health workers was less than 51%, and no family support (55.1%).

The results obtained p values of 0.004, 0.007, and 0.014, namely there is an influence of knowledge actors, the role of officers, and family support on the behavior of mothers in the early detection of cervical cancer with VIA method.

Conclusion: Knowledge factors, the role of officers, and family support affect the behavior of mothers in the early detection of cervical cancer using VIA method.

The results can be used as educational material on the importance of early detection of cervical cancer using VIA method in women of childbearing age.

Keywords: Behavior, cervical cancer, early detection, VIA.

Background

The prevalence and number of deaths from cervical cancer in the world in 2020 is 24.4%/100,000 of the world's population,

with a mortality rate of 14.4%/100,000 of the world's population. Indonesia is a country with the highest number of cervical cancer sufferers in the world (WHO, 2020).



Cancer deaths are expected to continue to rise, reaching more than 13.1 million by 2030 (GLOBACAN, 2019). According to WHO estimates, there are more than 265,000 cases of cervical cancer with 140,000 deaths each year in this region (Arum, 2018).

Cervical cancer can be prevented by doing several things, one of which is performing VIA, which is one method for early detection of cervical cancer, namely by applying 3-5% Acetic Acid to the cervix performed by inspecting first and then evaluating by looking directly into the eyes. The abnormal cervix, if smeared with 3-5% acetic acid, will be white (white epithelium) (Arum, 2018). The advantages of VIA examination are that it is done easily, practically and able to be implemented; the tools needed are very simple and do not require a long time to evaluate the results of the examination; the sensitivity of VIA in detecting cancer abnormalities is very high (Tilong, 2018) According to the Indonesian Health Demographic Survey (IHDS) (2018), about 21.6% of women in Indonesia have had VIA, while another 78.4% have not had VIA. This increases the risk of Indonesian women experiencing cervical cancer, (Ilan, 2018). According to data on the number of cervical cancers in the Riau province in 2018 reached 37%, while the coverage of early detection of cervical cancer with VIA examinations from the district and the Riau Provincial Health Center in 2018 in Pekanbaru city, women aged 30–49 years, totaling 74,884 people, only did VIA examinations. a total of 34 people (Pekanbaru Health Office, 2018).

The number of cases of cervical cancer in Indonesia is caused by the delay in examinations by health services. Therefore, in Indonesia, the VIA test is being developed by training health workers. Since cervical cancer screening was carried out

with a simple method, namely VIA, there has been a significant increase in cervical cancer decline, with the mortality rate down to 50–60% (Wijaya, 2018).

Based on data obtained from the Pekanbaru City Health Office in 2020, the highest number of reproductive age data was found at the Simpang Tiga Health Center at 20,175 people, with a population at risk of 20,175 people. The number of VIA examination coverages in 2018 reached 432 women of childbearing age, while in 2019, the VIA examination coverage decreased to 222 women of childbearing age. The scope of the VIA examination has been reduced to 101 women of childbearing age in 2020. Based on this data, it shows that the VIA examination has decreased every year, therefore the researchers chose the research location at the Simpang Tiga Health Center.

Objectives

To identify the the influencing factors of mother's behavior in early detection of cervical cancer by via method. at the Simpang Tiga Pekanbaru Health Center.

Methodology

Design

This study uses a descriptive correlation method with a cross-sectional approach.

The sampling technique is accidental sampling. The sample size is 98 respondents.

The measuring instrument used isa questionnaire to determine influencing Factors of Mother's Behavior In Early Detection of Cervical Cancer by VIA Method at the Simpang Tiga Pekanbaru Health Center. The analysis used is the chi-square test.

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Research Result

The demographics of the research results showed that the majority of the 98 respondents were in the age group 20–35 years old, had secondary education as much as 77.6%, did not work as much as 82.7%, did not do VIA 63.3%, had less knowledge as much as 61.2%, stated that the role of health workers was less than 51%, and respondents did not get family support as much as 55.1%.

Bivariate Analysis

Based on the results of data processing, the following results were obtained:

The influence of the knowledge factor on the mother's behavior in the early detection of cervical cancer with the VIA method

Table 1: The effect of the knowledge factor on the mother's behavior in the early detection of cervical cancer using the VIA method

Knowle dge	VIA behavior				Tot al	%	P.val ue
	Not		Yes				
	N	%	N	%			
Not enough	4	46.	1	14.	60	61.	0.004
	6	9	4	3			
Enough	6	6.1	1	10.	16	16.	
			2				
Well	1	11.	1	11.	22	22.	
	1	2	1	2			
Total	6	64.	3	35.	98	10	
	3	3	5	7			0

Based on table 10.1 above, it is known that 46.9% of the 60 respondents who lacked knowledge did not do VIA. The results of statistical tests obtained a p value of 0.004, which means p value 0.05, it can be concluded that there is early detection of cervical cancer with the VIA method is performed by influencing knowledge actors with maternal behavior.

- The influence between the role of the officer and the behavior of the mother in early detection of cervical cancer with the VIA method

Table 2. The influence between the role of the officer and the behavior of the mother in early detection of cervical cancer using the VIA method

Officer role	VIA behavior				Total	%	P.value
	Not		Yes				
	N	%	N	%			
Not enough	39	39.8	11	11.2	50	51.0	0.007
Well	24	24.5	24	24.5	48	49.0	
Total	63	64.3	35	35.7	98	100	

Based on table 2. above, it is known that of 50 respondents who stated that the role of officers was lacking, 39.8% did not do VIA. The results of statistical tests obtained a p value of 0.007, which means p value 0.05. It can be concluded that there is an effect of the role of the officer on the behavior of the mother when performing early detection of cervical cancer with the VIA method.

The influence of family support factors on a mother's behavior in the early detection of cervical cancer with the VIA method

Table 3: The influence of family support factors on maternal behavior in the early detection of cervical cancer using the VIA method

Family support	VIA behavior				Total	%	P.value
	Not		Yes				
	N	%	N	%			
Not supportive	4	41.	1	13.	54	51.	0.014
	1	8	3	3			
Supportive	2	22.	2	22.	44	49.	
	2	4	2	4			
Total	6	64.	3	35.	98	10	
	3	3	5	7			

Based on table 3 above, it is known that of 54 respondents who stated that their families were less supportive, 41.8% did not do VIA. The statistical test results obtained a p value of 0.014, indicating a p value of 0.05, implying that there is an effect of family support actors on maternal behavior in the early detection of cervical cancer using the VIA method.

Discussion

The results of the study of factors that influence the behavior of mothers in the early detection of cervical cancer with the VIA method at the Simpang Tiga Pekanbaru Health Center

1. The influence of the knowledge factor on the mother's behavior in the early detection of cervical cancer with the VIA method.

Based on the results of statistical tests that obtained a p value of 0.004, which means p value 0.05, it can be concluded that there is an effect of knowledge actors with maternal behavior on early detection of cervical cancer with the VIA method.

According to Lia (2018), knowledge is one of these factors. This is supported by research Dinika, (2018), which was conducted in Britajaya Village. Some of the women of childbearing age had less knowledge about the VIA examination. Lack of knowledge of respondents can influence the behavior of women of

childbearing age to perform VIA because they think taking the VIA examination is not an important thing to do.

The research is in line with the research results of the research conducted by Mirasyi (2018). The results of the univariate analysis of the level of knowledge about cervical cancer showed that most of the respondents' knowledge levels were moderate. One's knowledge really has an influence in determining a positive attitude or a negative attitude in humans. Knowledge is the most decisive domain in shaping a person's actions (Notoatmodjo, 2018).

The tendency of action in the condition of good knowledge is to approach, like, and expect a certain object, while the tendency of action in a negative attitude is to stay away, avoid, hate, and dislike certain objects. A person's attitude towards an object is a feeling of support or partiality or a feeling of being unsupportive or impartial towards a specific object due to a lack of knowledge (Azwar, 2019).

Knowledge has a very big influence on low levels of health, especially in carrying out early detection of cervical cancer through VIA, because with less knowledge, the implementation of early detection of cervical cancer through VIA is also low. This is influenced by the age factor, which is supported by general research data, namely most of the respondents aged 20–35 years, namely 62 people (70.5%).

The more mature the level of maturity and strength of a person, the more mature they will be in thinking and working in terms of public trust. Those who are more mature will trust more than people who are not yet mature enough. In addition to age, occupation also affects the knowledge of couples of childbearing age. This is supported by research data that most of the respondents do not work, namely 33 people (37.5%). For most of those who do not work, the level of knowledge about health is

very low, resulting in poor reproductive health behaviors, especially regarding VIA examinations, which are still low.

2. The influence of the role of health workers on the behavior of the mother in the early detection of cervical cancer with the VIA method

Based on the results of statistical tests that obtained a p value of 0.007, which means p value 0.05, it can be concluded that there is an effect of the role of the officer on the behavior of the mother when performing early detection of cervical cancer with the VIA method.

According to research Fita (2018), women of childbearing age who get a good role from health workers will tend to carry out VIA examinations compared to women of childbearing age who do not get support from health workers.

study Wulandari (2018) showed that there was a significant relationship between the role of health cadres and the behavior of the VIA examination. According to the study, good cadre support will also have a positive influence on the behavior of a person or society, while a lack of cadre support will have a negative influence on the behavior of a person or society. Someone who is considered important in life, usually his behavior and motivation, will be used as an example for society. So a health cadre must have knowledge about early detection of cervical cancer as a prevention method. on women of childbearing age

Health workers from the nearest community have the responsibility to develop health promotion in the form of Village Health Post (Poskesdes), Village Maternity Post (Polindes), Integrated Service Post (Posyandu), and others in every village or sub-district in their working area. Health workers have an obligation to foster and develop public health efforts (Notoatmodjo, 2018).

Based on the results of statistical tests, which obtained a p value of 0.014, which means p value 0.05, it can be concluded that there is an effect of family support actors on maternal behavior when performing early detection of cervical cancer with the VIA method.

This research is also in line with research conducted by Linadi (2018). There is a relationship between the husband's support and women of childbearing age participation behavior in the early detection of cervical cancer. $p = 0.01$. According to the study, this was due to the husband's lack of knowledge about the VIA examination, so that the husband was less concerned about the importance of the VIA examination. The support that a wife wants the most is support from her husband. For example, information on how to prevent cervical cancer, which is easily obtained at the nearest health center, namely the VIA examination. Husbands who respond well will usually be followed by providing support in the form of fees for the VIA examination, and the husband states that he does not mind if his wife asks to be taken to the place where the VIA examination is carried out. Family support is needed in health program activities. One of them is the VIA examination (Juniadi, 2018).

Conclusion

Knowledge factors, the role of officers, and family support affect the behavior of mothers in the early detection of cervical cancer using the VIA method.

Declaration of conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of the article

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REFERENCES

- American cancer society. (2018). *Cancer fact and figures 2018*, diambil dari <http://www.cancer.org/research/cancerfactsstatistics/cancerfactsfigures2018/> yang diakses tanggal 8 Januari 2021.
- Anwar, Syaifuddin. (2019). *Sikap manusia teori dan pengukurannya*. Yogyakarta : Pustaka Pelajar.
- Anwar, Syaifudin. (2018). *Sikap manusia*. Yogyakarta : Pustaka Pelajar.
- Anwar, Syaifuddin. (2018). *Metode penelitian*. Yogyakarta : Pustaka Pelajar.
- Andari, I'ana Aulia. (2018). *Pengaruh pendidikan kesehatan dan peer group terhadap perilaku ibu melakukan deteksi dini kanker serviks*, diambil dari <http://eprints.ums.ac.id/30724> yang diakses tanggal 6 Januari 2021. Surakarta: UMS.
- Anthony F Jorm. (2018). *Predictors of depression stigma*. Journal BMC Psychiatry, 8:25
- Arikunto, Suharsimi. (2018). *Prosedur penelitian suatu pendekatan praktik*. Jakarta : PT Rinera Cipta.
- Artiningsih, Ninik. (2018). *Hubungan antara tingkat pengetahuan dan sikap wanita usia subur dengan pemeriksaan inspeksi visual asam asetat dalam rangka deteksi dini kanker serviks di Puskesmas Blooto Kecamatan Prajurit Kulon Mojokerto*, diambil dari <http://eprints.uns.ac.id/7417/> yang diakses tanggal 8 Januari 2021. Surakarta : UNS.
- Arum, Rahma, Rina dan Fitria Prabandari. (2018). *Beberapa faktor yang mempengaruhi minat wus (wanita usia subur) dalam melakukan pemeriksaan IVA (Inspeksi Visual Asam Asetat)*. Bidan Prada : Jurnal Ilmiah Kebidanan Vol. 3 No. 1 Edisi Juni 2018.
- Agnes Higgins. (2018). *Impact of perinatal mental health education on student midwives' knowledge, skills and attitudes: A Pre/Post Evaluation Of A Module Of Study.Nurse Education Today* 36, 364-369
- Christian N. Eze et al. (2018). *effect of health education on trainee teachers knowledge, attitudes, and first aid management of epilepsy an interventional study*. SEIZURE: European Journal of Epilepsy 14-16
- Delia, Wijaya. (2018). *Pembunuh ganas itu bernama kanker serviks*. Yogyakarta : Sinar Kejora.
- Depkes RI. (2018). *Infodatin : stop kanker*, diambil dari <http://www.depkes.go.id/resources/download/pusdatin/infodatin/infodatin-kanker.pdf> yang diakses tanggal 6 Januari 2021. Jakarta : Pusat data dan informasi kementerian kesehatan RI.
- Harahap, Syarifah. (2018). *Analisis pengetahuan dan sikap ibu rumah tangga terhadap pelaksanaan pap'smear untuk deteksi kanker serviks di Puskesmas Petisah Medan*, diambil dari [http:// repository. usu. ac. Id/handle /123456789/49696](http://repository.usu.ac.id/handle/123456789/49696) pada tanggal 8 Agustus 2018. Sumatera : USU.
- Hidayat, A. Aziz Alimul. (2018). *Metode penelitian kebidanan : Teknik Analisa Data*. Jakarta : Salemba Medika.
- Hidayat, A. Aziz Alimul. (2018). *Metode Penelitian Kesehatan : paradigma Kuantitatif*. Surabaya : Kepala

- Pariwarna. *Metode Penelitian Kebidanan*
- Hidayat, A. Aziz Alimul. (2018).: *Teknik analisa data edisi 2*. Jakarta : Salemba Medika.
- Herijulianti, Eliza, dkk. (2018). *IVA test, akurat untuk deteksi kanker serviks, diambil dari* <http://www.jatengprov.go.id/id/berita-utama/iva-test-akurat-untuk-deteksikanker-serviks> yang diakses tanggal 8 Januari 2021. Semarang : Humas Jateng.
- IARC, Globocan. (2018). *Estimated cancer incidence, mortality and prevalence worldwide in 2018, diambil dari* <http://globocan.iarc.fr/Default.aspx> yang diakses tanggal 6 Januari 2021.
- Li Yu Song et al. (2018). *Community Attitudes towards the mentally "the result of a national survey of the taiwan population"*. International Journal Of Social Psychiatry 51(2) 174-188.
- Mardiana, Lina. (2018). *Kanker pada wanita : pencegahan dan pengobatan dengan tanman obat*. Jakarta: Penebar Swadya
- Notoadmodjo, Soekidjo. (2018). *Pengantar Perilaku Manusia*. Jakarta : Rineka Cipta.
- Notoadmodjo, Soekidjo. (2018). *Metode penelitian kesehatan*. Jakarta : Rineka Cipta.
- Notoadmodjo, Soekidjo. (2018). *Promosi kesehatan dan ilmu perilaku*. Jakarta : Rineka Cipta.
- Notoadmodjo, Soekidjo. (2018). *Metode penelitian kesehatan*. Jakarta : Rineka Cipta.
- Nugroho, Taufan. (2018). *Buku ajar obstetri untuk mahasiswa kebidanan*. Yogyakarta : Nuha Medika.
- Nurrarif, Amir Huda dan Hardhi Kusuma. (2018). *Aplikasi asuhan keperawatan berdasarkan diagnosa medis dan NANDA NIC-NOC, Jilid 1*. Yogyakarta : Mediacion Publishing.
- Nurwijawa, Hartanti, Andrijono, dan Suheimin. (2018). *Cegah dan Deteksi Kanker Serviks*. Jakarta : Elek Media Komputerindo.
- Rasjidi, Imam. (2019). *Deteksi Dini dan Penceahan kanker pada wanita*. Jakarta : Sagung Seto.
- Rostia, Chen dan Tim Cancer Helps. (2018). *Solusi cerdas mencegah dan mengobati kanker*. Jakarta : Agromedia Pustaka.
- Riduwan. (2005). *Skala Pengukuran Variabel Penelitian*. Bandung : Alfabeta.
- Riset Kesehatan Dasar. (2018). *Badan Penelitian Dan Pengembangan Kesehatan, diambil dari* <http://biofarmaka.ipb.ac.id/biofarmaka/2018/Anlan2018%20-%20Info%20>.
- Saam, Zulfan dan Sri wahyuni. (2018). *Psikologi keperawatan*. Jakarta : Raja Grafindo Persada.
- Sadik, Sabah.et al. (2018). *Public perception of mental health in iraq. international journal of mental health systems, 4:26* diambil dari <http://www.ijmhs.com/content/4/1/26>
- Sangadji , Etta Mamang dan Sopiah, (2018). *Metodologi Penelitian : Pendekatan Praktis Dalam Penelitian*. Yogyakarta : ANDI.
- Sari, Wening, dkk. (2018). *Paduan lengkap kesehatan wanita*. Jakarta : Penebar Plus
- Setiadi. (2018). *Konsep dan penulisan riset keperawatan*. Yogyakarta : Graha Ilmu.

- Sugiyono. (2018). *Metode penelitian kuantitatif, kualitatif dan R&D*. Bandung : Alfabeta.
- Sulistiowati, Eva dan Anna Maria Sirait. (2018). *Pengetahuan tentang faktor risiko, perilaku dan deteksi dini kanker serviks dengan Inspeksi Visual Asam Asetat (IVA) Pada Wanita Di Kecamatan Bogor Tengah, Kota Bogor*. Diambil dari <http://ejournal.litbang.depkes.go.id/index.php/BPK/article/view/3632>.
- Sukmana, Wahyu Tri Nur. (2018). *Hubungan pengetahuan dan sikap pada pasangan usia subur terhadap perilaku pemeriksaan pap smear di Desa Pucangan Kartasura Sukoharjo*, diambil dari <http://eprints.ums.ac.id/18394/> yang diakses tanggal 16 Maret 2021. Surakarta : UMS.
- Sulastrri, Dyah I'ana Romadani dan Aulia Andari (2018). *Efektifitas Promosi kesehatan sebagai deteksi dini kanker serviks untuk menurunkan angka kematian*, diambil dari <http://download.portalgaruda.org/article.php?article=35686&val=426&title=efektifitas%20promosi%20kesehatan%20sebagai%20deteksi%20dini%20kanker%20serviks%20untuk%20menurunkan%20angka%20kematian> yang diakses tanggal 8 Desember 2020. Surakarta : UMS.
- Sulistiowati, Eva dan Anna Maria S. (2018). *Pengetahuan tentang faktor resiko, perilaku, dan deteksi dini kanker serviks dengan Inspeksi Visual Asam Asetat (IVA) Pada Wanita Di Kecamatan Bogor Tengah Kota Bogor*. Buletin Penelitian Kesehatan : Jurnal Kesehatan Vol 42 No. 3 Edisi September 2018.
- Sunaryo. (2018). *Psikologi untuk keperawatan*. Jakarta : EGC.
- Suparyanto. (2018). *Deteksi dini kanker serviks dengan metode IVA (Inspeksi Visual Asam Asetat)*, diambil dari <http://drsuparyanto.blogspot.co.id/2018/04/deteksi-dini-kanker-serviks-denganmetode-iva.html> yang di upload tanggal 2 April 2018 dan diakses tanggal 18 Maret 2018. Jawa timur : STIKES Jombang.
- Suryabrata, Sumadi. (2018). *Psikologi pendidikan*. Jakarta : Rajawali.
- Tilong, Adi D., (2018). *Bebas dari ancaman kanker serviks*. Yogyakarta : Flashbook.
- Utami, Nungki Marcella. (2018). *Hubungan tingkat pengetahuan dengan perilaku deteksi dini kanker serviks pada pasangan usia subur*, diambil dari http://eprints.ums.ac.id/26035/15/NA_SKAH_PUBLIKASI.pdf yang diakses pada tanggal 8 Desember 2018. Surakarta : UMS.
- World Health Organization. (2018). *Cancer*, diambil dari <http://www.who.int/cancer/en/index.html> yang diambil pada 8 Desember 2020.
- Wawan. A dan Dewi M. (2018). *Teori & pengukuran pengetahuan, sikap, dan perilaku manusia dilengkapi contoh kuesioner*. Yogyakarta : Nuha Medika.