

Original Article

The relationship between perceived self-efficacy and cervical cancer screening among health care providers

Linda Juwita^{1*} , Pertiwi Perwiraningtyas², Ninda Ayu Prabasari¹ 

ABSTRACT

Introduction: Cervical cancer ranks second worldwide as a disease that causes death in women. Healthcare providers have low cervical cancer screening behavior with the Pap smear method. This study aimed to analyze the relationship between perceptions of self-efficacy and the behavior of cervical cancer screening using the Pap Smear method for health care providers.

Methods: This descriptive observational study, namely case cross-sectional design, was applied in this study. The population in this study were all female healthcare providers at the Gotong Royong Hospital in Surabaya. The sampling method is purposive sampling. The sample in this study was 51 respondents who met the inclusion criteria. The independent variable in this study is perceived self-efficacy, using a questionnaire. The dependent variable is the screening behavior of the pap smear method using the questionnaire.

Results: The results of the analysis test were $0.866 > 0.05$, which means there is no relationship between perceived self-efficacy on cervical pap smear cancer screening behavior. Spearman Rank test $p > 0.05$, which means there is no relationship between perceptions of self-efficacy and healthcare providers' screening behavior for cervical smears.

Conclusion: There is no relationship between self-efficacy on the behavior of cervical cancer screening using the Pap smear method. Individual intrinsic and extrinsic factors are things that influence screening behavior. So, it is necessary to do other research on the factors influencing screening behavior, both intrinsic (demographics, health beliefs, emotional, and contextual) and extrinsic (husband support, peer support and education).

Keywords: cervical cancer; medical personnel; pap smear; paramedics

INTRODUCTION

Cervical cancer ranks second worldwide as a disease that causes death in women (Rulino & Mubata, 2016). The best cancer therapy success compared to other cancers is cervical cancer. This can happen if detected early. However, this opportunity is not matched by an appropriate early detection method for the community (Sutejo & Arieska, 2021).

Women's healthcare providers, including providers, have no better awareness than the public in screening for cervical cancer. Many medical personnel did not do pap smears (Anyebe et al., 2014). High perceived self-efficacy in women of childbearing age have a greater chance of implementing cervical cancer screening (Winarti, 2019). Healthcare providers, including nurses and midwives, have a high level of knowledge about cervical cancer (Rulino & Mubata, 2016). The study's results explain no relationship between knowledge and self-efficacy (Remedina & Palupi, 2021).

According to the results of research that has been carried out, there is no relationship between knowledge and attitudes to taking cervical cancer prevention actions (Aziz & Ade, 2016). The relationship between perceived self-efficacy and Pap smear screening behavior of health care providers is not yet clear. Research by Zulianty shows a relationship between self-efficacy and pap smear examination of female health care providers in Surabaya. However, this study explained that several indicators were not related, such as perceived susceptibility and perceived seriousness with the pap smear examination (Zulianty E, 2018).

The incidence of cervical cancer in ASEAN is described as follows: Singapore is 25.0 in the Chinese race, 17.8 in the Malay race, and Thailand at 23.7 per 100,000 population. For the territory of Indonesia, it is estimated that there are around 40 thousand new cases of cervical cancer each year. Cervical cancer has the highest number of sufferers in Indonesia, approximately 36%; this data is based on 13 pathology laboratory centers (Rasjidi, 2009). In the results of the Cervical Cancer Screening study with Pap Smear Examination in the Midwife Profession, it was found that 62.5% of respondents did not do routine Pap smear screening (Syaiful et al., 2018). Research on Personal Factors, Self-Efficacy and Cervical Cancer Prevention Efforts in Women of Productive Age found that 67% of women had low self-efficacy (Armini et al., 2016).

Self-efficacy is the belief to take the desired action; self-efficacy is a person's background to take action or control a

OPEN ACCESS

*Correspondence: Linda Juwita (lindajuwita@ukwms.ac.id)

¹Department of Maternity and Pediatric Nursing, Faculty of Nursing, Universitas Katolik Widya Mandala Surabaya, Surabaya, Indonesia

²Department of Maternity Nursing, Faculty of Health Sciences, Universitas Tribhuwana Tunggaladewi, Malang, Indonesia

© The Author(s) 2023
Volume 9 (2): 74-78
<http://dx.doi.org/10.20473/pnmj.v9i2.36669>

e-ISSN: 2355-1577 | p-ISSN: 2656-4629

Article History

Received: August 18, 2022 | Revised: March 30, 2023 | Accepted: July 05, 2023 | Published: August 31, 2023

certain situation (Bandura *et al.*, 1999). Some of the reasons for women, especially midwives, for not having routine Pap smear screenings are shame (reluctance), fear, no complaints (abnormalities), sterility (medical devices), laziness and cost (Syaiful *et al.*, 2018). The community's refusal to screen for cervical cancer impacts cancer being diagnosed at an advanced stage; this increases the incidence of death from cervical cancer (Susanti, 2013).

Women who believe in carrying out primary and secondary prevention of cervical cancer can increase self-efficacy and eliminate anxiety to prevent cervical cancer through cervical cancer screening (Armini *et al.*, 2016). Early detection of precancerous lesions can help reduce the incidence of cervical cancer and decrease the mortality rate caused by cervical cancer (Peirson *et al.*, 2013). Early detection by screening can be used with pap smear cytology (Bal *et al.*, 2012). Based on this phenomenon, the researchers are interested in researching The Relationship of perceived Self Efficacy on The Behavior of Pap Smear Screening of Health care providers. Healthcare providers have a function as role models for the community. The hope is that when Health care providers have good cervical cancer screening behavior, they can set an example so that people can do the same thing. So that it can reduce the mortality rate of cervical cancer

METHODS

Design

This descriptive observational study, namely case cross-sectional design, was applied in this study. The sample in this study was given a self-efficacy and cervical cancer screening behavior questionnaire to be filled in completely. The data collection is carried out at the same time.

Sample and Setting

The population in this study were all female healthcare providers who worked at the Gotong Royong Hospital in Surabaya. This research method is done by taking the sample used is purposive sampling. The samples in this study met the inclusion criteria: female healthcare providers of childbearing age, married women, and willing to be respondents. Exclusion criteria: diagnosed with cervical cancer. The number of samples in this study amounted to 51 respondents.

Variables

The independent variable in this study is perceived self-efficacy and the dependent variable is the behavior of the pap smear screening method.

Instruments

The perceived self-efficacy questionnaire was adopted from previous research by referring to the health promotion model theory, with indicators namely level, strength, generality of support from husband and costs (Malehere *et al.*, 2019). It consists of 8 questions, with the answer choices for each favorable question being strongly agree (4), agree (3), disagree (2) and strongly disagree (1). In contrast, the unfavorable questions have the opposite score. The lowest score is 8, and the highest score is 32. The category of low self-efficacy is the score obtained between 8-20, while for high self-efficacy, the score obtained is between 21-32. The questionnaire was modified and adjusted regarding cervical cancer screening

using the Pap smear method. This questionnaire has met the validity and reliability test with Cronbach's Alpha 0.899. The dependent variable is the behavior of the pap smear screening method, whether the respondent has ever screened a pap smear using a questionnaire. The pap smear behavior questionnaire was given 1 question related to participation in cervical cancer examinations with yes and no answer options.

Procedure

This research proposal was submitted to the Widya Mandala Catholic University Research and Community Service Institute (LPPM) to be validated through a review process. After the researcher's proposal was accepted, the researcher continued processing a research permit through the submission of the RSGR proposal. The next researcher determines the research population. After obtaining prospective respondents and determining respondents who meet the research criteria, the researcher and the team provide information related to the research to be carried out, including the objectives, schedule of implementation, and the things carried out during the research, namely the benefits of the research. After the prospective respondent understands the information related to the research, the researcher and the team provide informed consent, which the respondent candidate signs. The procedure for collecting data is by giving a self-efficacy questionnaire to respondents. After the prospective respondent understands the information related to the research, the researcher and the team provide informed consent, which the respondent candidate signs. The procedure for collecting data is by giving respondents a self-efficacy and behavior of cervical cancer screening through Pap smear questionnaire. After the respondents fill out the questionnaire, the data will be edited, scored and tabulated for further statistical testing.

Data Analysis

Data were analyzed using univariate and bivariate tests. Respondents' characteristic data includes age, occupation, education level, marital status and family history of cancer using descriptive statistics for special data, namely self-efficacy and cervical cancer screening behavior using the Spearman Rank test with a significance value of 5%.

Ethical Considerations

The research has passed the ethics test, which was carried out at the Widya Mandala Catholic University Faculty of Medicine, Surabaya, with Ref: 139/WM12/KEPK/DOSEN/T/2021.

RESULTS

Based on Table 1, most of the respondents' ages are 26-35 years, totaling 38 respondents (74.5%), almost half of the respondents' occupations are nurses 24 respondents (47.1%), most of the respondents' last education is Diploma III as many as 38 respondents (74.5%), almost all respondents have a marital status is married as many as 50 respondents (98.1%) and almost all respondents do not have a family history of cancer of 47 respondents (92.2%).

Based on Table 2, it is explained that most (82.36%) respondents who have never had a Pap smear have low self-efficacy (43.14%). The results of Spearman's rank with a p-value of $0.866 > 0.05$ mean no relationship exists between perceived self-efficacy and Pap smear cervical cancer screening behavior.

Table 1. Characteristics of Respondents (N=51)

No	Characteristics	n	%
1	Age		
	<26	3	5.9
	26-35	38	74.5
	36-45	8	15.7
	46-55	2	3.9
2	Occupation		
	Medical	3	5.9
	Paramedic	48	94.1
3	Education		
	Diploma III	38	74.5
	Diploma IV	5	9.8
	Bachelor	8	15.7
4	Marital status		
	Married	50	98.1
	Widow	1	1.9
5	Family history of cancer		
	Yes	4	7.8
	Not	47	92.2

Table 2. Cross Tabulation of Perceived Self Efficacy with Pap Smear Participation (N=51)

Perceived Self-Efficacy	Cervical Cancer Screening Behavior Pap Smear		Total	Spearman's rho
	Negative	Positive		
High	20 39.22%	4 7.84%	24 47.06%	0.866
Low	22 43.14%	5 9.80%	27 52.94%	
Total	42 82.36%	9 17.64%	51 100.0%	

DISCUSSION

In the results of the study, it was found that the majority of respondents had low perceived self-efficacy by 27%. The researcher argues that this is due to the sufficient level of knowledge due to the high level of education as seen from the demographic data that all respondents have the last education in college. A person's belief that an individual can carry out a task at a certain level is called self-efficacy (Bandura et al., 1999). The study's results explain that good knowledge is one factor that increases self-awareness in terms of health so that it can change one's lifestyle towards a more healthy, obedient to therapy and of high quality (Masyafahani et al., 2020). The level of education influences a person's ability to process information. Knowledge can help mothers in changing behavior and increase self-efficacy. The link between education and self-efficacy is that the higher a person's level of education, the higher the quality of his knowledge, the more mature his intellectual skills will be so that he has high self-efficacy (Laursen, 2005).

The research data shows that the majority of respondents for the pap smear method of screening behavior are negative, which means that the respondents have never checked themselves; the researchers argue that this is because most of

the respondents do not have families with a history of cancer (92.2%) even though all respondents work in the health services. Based on the results of qualitative research, it can be seen that all informants believe that cervical cancer is a dangerous disease, but they do not do screening (Rio & Suci, 2017). The results of the study show that the high level of individual knowledge is not directly proportional to the attitude of the individual to move to carry out HPV vaccination (Yantho, 2012). This opinion is in line with research conducted that there is a relationship between a family history of cancer and cervical cancer screening. Respondents with cancer patients with no family history of cancer experienced delays in the treatment of health services. Mothers with a cervical cancer diagnosis of 65.5% came to health services already in an advanced stage (Surbakti et al., 2020). According to Abraham & Sheeran, belief is an enduring individual character that shapes behavior and is acquired through socialization. Beliefs related to the effectiveness, ease, and consequences of doing or not doing a certain behavior will determine whether the individual does or does not perform the behavior (Abraham & Sheeran, 2005).

The statistical test results show no relationship between self-efficacy and the behavior of cervical cancer screening using the Pap smear method, according to (Mishali et

al., 2011). Decreased self-efficacy can reduce individual adherence to chronic disease treatment regimens. This opinion aligns with the research results, which explain that self-efficacy is very influential in the obedience of Diabetes Mellitus patients in doing the right diet, foot care, physical activity checking blood sugar (Mishali et al., 2011). Someone who has low self-efficacy will see his life as something outside of himself (Bhat et al., 2013). Researchers have the opinion that low self-efficacy makes respondents not adhere to health behaviors that should be implemented even though; respondents are aware of the importance of these behaviors but do not want to do these positive things, so there is no desire to take screening actions.

The statistical test results show no relationship between self-efficacy and the behavior of cervical cancer screening using the Pap smear method. Bandura revealed that several factors influence the difference in Self efficacy in each individual. The three components referred to by Bandura consist of magnitude, strength, and generality (Bandura et al., 1999). If you look at the respondents' work, all respondents have sufficient knowledge about cervical cancer and screening. All respondents work in the health sector, but most of the work environment does not do the screening. The results showed that cervical cancer screening carried out by women of childbearing age was influenced by many factors, not only from within themselves but also aspects of support from the environment. In addition, qualitative research related to the factors that influence cervical cancer screening in midwives found the conclusion that the factors that influenced respondents not to screen were fear, feeling ashamed, feeling that there were no complaints, laziness, sterility of tools, costs (Syaiful et al., 2018). Researchers believe that the positive behavior of cervical cancer screening is supported by intrinsic (demographics, health beliefs, emotional, and contextual) and extrinsic factors (husband support, peer support and education). If these factors collaborate well, they will impact cervical cancer screening behavior.

CONCLUSION

There is no relationship between self-efficacy on the behavior of cervical cancer screening using the Pap smear method. Individual intrinsic and extrinsic factors are things that influence screening behavior. So, it is necessary to do other research on the factors influencing screening behavior, both intrinsic (demographics, health beliefs, emotional, and contextual) and extrinsic (husband support, peer support and education).

Limitations in this study were the population and sample used were limited to one hospital setting. So similar research is still needed in a larger population scope so that the results can be generalized.

Declaration of Interest

The authors declare no conflict of interest.

Acknowledgment

We thank the Surabaya Gotong Royong Hospital for allowing research at the location. Thank you also to the Catholic University of Widya Mandala Surabaya and Tribhuwana Tunggaladewi Malang University, who have materially supported the implementation of this article's research and publication.

Funding

None.

Author Contribution

The author's contribution to this study was that the first author, LJ was in charge of developing research concepts and questions, conducting research, and writing reports. The second writer, NAP, did statistical analysis and helped do the writing report; also PP helped make the writing report and was the writing editor.

Data Availability

The datasets generated during and/or analyzed during the current study are available from the corresponding author on reasonable request.

REFERENCES

- Abraham, C., Sheeran, P. (2005). Predicting Health Behavior-Research and Practice With Social Cognition Models (2th Edition). In P. N. Conner, M & Norman (Ed.), *The Health Belief Model*. Open University Press.
- Anyebe, E. E., Opaluwa, S. A., Muktar, H. M., Philip, F. (2014). Knowledge and Practice of Cervical Cancer Screening amongst Nurses in Ahmadu Bello University Teaching Hospital Zaria. *Research On Humanities and Social Sciences*, 4(7), 33–40.
- Armini, N. K. A., Kurnia, I. D., Hikmah, F. L. (2016). Personality Factor, Self Efficacy and Prevention of Cervical Cancer among Childbearing Age Women. *Jurnal Ners*, 11(2), 294–299.
- Aziz, A., Ade, W., S. (2016). Hubungan Pengetahuan Dan Sikap Terhadap Tindakan Tentang Pap Smear Dan Inspeksi Visual Asetat Pada Wanita Pekerja Seksual Tidak Langsung Di Hotspot X Kecamatan Marpoyan Damai Pekanbaru Sebagai Deteksi Dini Kanker Servik. *Jom FK*, 3(2), 1–16.
- Bal, M., Goyal, R., Suri, A., & Mohi, M. (2012). Detection of abnormal cervical cytology in Papanicolaou smears. *Journal of Cytology*, 29(1), 45. <https://doi.org/10.4103/0970-9371.93222>
- Bandura, A., Freeman, W. H., & Lightsey, R. (1999). Self-Efficacy: The Exercise of Control. *Journal of Cognitive Psychotherapy*, 13(2), 158–166. <https://doi.org/10.1891/0889-8391.13.2.158>
- Bhat, A. M., Najjar, S. A., Dar, M., & Saini, N. (2013). Self Efficacy and Proactive Attitude among Patients With Diabetes. *Indian Journal of Health and Wellbeing*, 4(2), 333–338.
- Gipfel Remedina, & Fitria Hayu Palupi. (2021). Pengaruh pengetahuan dan pendidikan terhadap self efficacy ibu dalam melakukan baby massage dan baby gym di Desa Madegondo Kecamatan Grogol Kabupaten Sukoharjo. *Jurnal Ilmu Kebidanan Dan Kesehatan (Journal of Midwifery Science and Health)*, 12(2), 08–13. <https://doi.org/10.52299/jks.v12i2.84>

- Laursen, E. K. (2005). Rather Than Fixing Kids – Build Positive Peer Cultures. *Reclaiming Children and Youth*.
- Malehere, J., Armini, N. K. A., & Ulfiana, E. (2019). Gambaran Perilaku Pencegahan Kanker Serviks Pada Wanita Pasangan Usia Subur di Puskesmas Rewarangga. *Pediomaternal Nursing Journal*, 5(1), 63–68. <https://doi.org/10.20473/pmnj.v5i1.12355>
- Masyafahani, M. A. H., Sukartini, T., Probowati, R. (2020). Gambaran Self Efficacy Dan Pengetahuan Pada Klien Tuberkulosis: Self Efficacy And Knowledge Description On Tuberculosis Clients. *Jurnal Ilmiah Keperawatan*, 6(1).
- Mishali, M., Omer, H., & Heymann, A. D. (2011). The importance of measuring self-efficacy in patients with diabetes. *Family Practice*, 28(1), 82–87. <https://doi.org/10.1093/fampra/cmq086>
- Peirson, L., Fitzpatrick-Lewis, D., Ciliska, D., & Warren, R. (2013). Screening for cervical cancer: a systematic review and meta-analysis. *Systematic Reviews*, 2(1), 35. <https://doi.org/10.1186/2046-4053-2-35>
- Rasjidi, I. (2009). Epidemiologi Kanker Serviks. *Indonesian Journal of Cancer*, 3(3), 103–108. <https://doi.org/10.33371/ijoc.v3i3.123>
- Rio, S., Suci, E. S. T. (2017). Persepsi tentang kanker serviks dan upaya prevensinya pada perempuan yang memiliki keluarga dengan riwayat kanker. *Jurnal Kesehatan Reproduksi*, 4(3), 159–169.
- Rulino, L., Mubata, Y. (2016). Gambaran Tingkat Pengetahuan Perawat Dan Bidan Tentang Kanker Serviks Di Ruang RPKK Lantai 7 Blok B. *Jurnal Akademi Keperawatan Husada Karya Jaya*, 2(2), 46–50.
- Surbakti, E., Simare-mare, S. A., & Sembiring, A. (2020). Hubungan karakteristik, riwayat keluarga, dan pengetahuan pada ibu yang menderita kanker serviks dalam keterlambatan mencari pengobatan ke pelayanan kesehatan. *COLOSTRUM: Jurnal Kebidanan*, 1(2), 35–48. <https://doi.org/10.36911/colostrum.v1i2.691>
- Susanti, D. H. (2013). Faktor-faktor yang Mempengaruhi Motivasi Perempuan untuk Melakukan Pemeriksaan Skrining Kanker Serviks. [Perpustakaan UI]. <https://lib.ui.ac.id/detail?id=20329713&lokasi=lokal>
- Sutejo, I. R., & Arieska, K. M. (2021). Literatur Review : Rapid Immunochromatography Sebagai Metode Skrining Kanker Serviks Berbasis Deteksi Onkoprotein HPV pada Urin. *Jurnal Kesehatan*, 8(3), 200–207. <https://doi.org/10.25047/j-kes.v8i3.164>
- Syaiful, S., Tarigan, F. L., & Zuska, F. (2018). Skrining kanker serviks dengan pemeriksaan Pap smear pada profesi bidan di Rumah Sakit TK II Putri Hijau Medan tahun 2017. *Jurnal Riset Hesti Medan Akper Kesdam I/BB Medan*, 3(2), 1. <https://doi.org/10.34008/jurhesti.v3i2.34>
- Winarti, E. (2019). Pengaruh Self Efficacy Terhadap Pelaksanaan Deteksi Dini Kanker Serviks Metode IVA di Puskesmas Kota Kediri. *Journal of Public Health Research and Community Health Development*, 2(2), 141. <https://doi.org/10.20473/jphrecode.v2i2.12231>
- Yantho, E. (2012). Pengaruh Tentang Pengetahuan Kanker Seviks Terhadap Minat Dan Perilaku Mengenai Vaksinasi HPV Pada Mahasiswa Tingkat Pertama Fakultas Kedokteran Unika Atma Jaya Tahun 2011. Universitas Katolik Atma Jaya.
- Zulianty E. (2018). Analisis Faktor yang Berhubungan Dengan Pemeriksaan Pap Smear Pada Tenaga Kesehatan Berdasarkan Health Belief Model (HBM) di Surabaya. Perpustakaan Universitas Airlangga.