Vol 9 No 2 July 2025

ANDALAS OBSTETRICS AND GYNECOLOGY JOURNAL
Correspondence Address:
Editorial Room Andalas Obstetrics and Gynecology Journal, 2nd Floor Obstetrics and Gynecology Department. M. Djamil Central General Hospital Padang, Jl. Perintis Kemerdekaan Padang, West Sumatra 25127
Website:
http://jurnalobgin.fk.unand.ac.id/

eISSN : 2579-8324 pISSN : 2579-8413

RESEARCH ARTICLE

Counseling's Impact on Reproductive-Aged Women Knowledge and Attitude at Andalas Health Center

Ida Rahmah Burhan[1,*], YN Zuhal Chaisart Chaniago[2], Claudia Triananda[2], Khalisha Azzahra Pramesti Abdillah[2], Rifvia Mustikaweni Zachraina[2], Zakiya Zulviyanda[2]

[1] *Departement of Public Health and Medicine Community, Faculty of Medicine, Andalas University, Padang, West Sumatra, Indonesia*

[2] *Student of faculty of Medicine, Andalas University, Padang, West Sumatra, Indonesia*

Corresponding Author: *Ida Rahmah Burhan; idarahmahburhan@med.unand.ac.id ; +62 811-660-401*

Submitted : March 2, 2025; **Accepted:** July 10, 2025; **Published:** July 25, 2025

Doi : https://doi.org/10.25077/aoj.9.2.241-250.2025

Abstract

Background: *Cervical cancer is the fourth most common cancer in women. In Indonesia cervical cancer is the second most common cancer among women, with 50% of women died from the disease. Prevention of cervical cancer can be done by regular screening. Therefore, a national strategy was made by the Ministry of Health to accelerate Indonesia's progress towards the elimination of cervical cancer. The strategy was adapted in local community health center, including Andalas Health Center. Cervical cancer screening rate at Puskesmas Andalas remains inadequate with coverqge of only 1.23%. This study aimed to determine the general characteristics, evaluate the level of knowledge and attitude regarding cervical cancer screening test, and assess the impact of health promotion through counseling and SOSIALITA pocketbook on knowledge and attitude of reproductive-aged women in the working area of Andalas Health Care.*

Methods: *This study is a pre-experimental study with one group pretest-posttest method with respondents of 25 reproductive-aged women in working area of Andalas Health Center.*

Results: *40% women of reproductive age are in late adulthood (36-45 years), 80% had a senior high school education, 92% are not working, and 96% are married. Most reproductive-aged women have low-level knowledge (48%) and negative attitude (76%). The results of the pretest and posttest regarding cervical cancer detection test showed an increase in high-level knowledge and positive attitude.*

Conclusion: *There is a significant relationship between health counseling and SOSIALITA pocketbook and reproductive-aged women's knowledge and attitude regarding cervical cancer early detection test ($p<0.05$)*

Keywords*: cervical cancer, IVA test, HPV DNA test, early detection, reproductive health*

© 2025 Author. (CC BY) license.
Published by Faculty of Medicine Andalas University.

https://doi.org/10.25077/aoj.9.2.241-250.2025

INTRODUCTION

Cervical cancer is a malignancy that originates from the cervix. The cervix is the lower third of the uterus, cylindrical in shape, protruding and connected to the vagina via the external uterine ostium.[1] This disease is caused by Human Papillomavirus (HPV) infection, especially types 16 and 18, which has oncogenic properties and can develop into malignancy if not detected early.[1,2] Human papillomavirus (HPV) is a widespread sexually transmitted infection that can affect the skin, genital area, and throat. Nearly all sexually active individuals will be exposed to HPV at some point in their lives, often without noticeable symptoms. In most cases, the immune system naturally clears the virus. However, if a high-risk HPV infection persists, it can lead to abnormal cell growth, which may progress to cancer.[3]

Cervical cancer is the fourth most common cancer in women. In 2022, an estimated 660.000 women were diagnosed with cervical cancer worldwide and about 350.000 women died from the disease.[3] In Indonesia cervical cancer is the second most common cancer among women, with the majority of women (70%) diagnosed in advanced stages when treatment is less effective. As a result, 50% of women diagnosed with cervical cancer died from the disease.[4] Many who suffers from cervical cancer only seek treatment when the disease is already severe. This happens because there are still very few women who undergo routine examinations, where only 4.9% have ever been screened for cervical cancer.[5]

Prevention of cervical cancer can be done by regular screening. Cervical cancer screening aims to detect precancerous lesions so that interventions can be made before they develop into invasive cancer. Women should be screened for cervical cancer every 5–10 years starting at age 30. Women living with HIV should be screened every three years starting at the age of 25. The worldwide strategy recommends at least two lifetime screenings, including a high-performance HPV test, by the age of 35 and again at the age of 45. Precancerous lesion hardly cause symptoms, therefore regular cervical cancer screening is essential, even on individual who have been vaccinated against HPV.[3]

To reduce cervical cancer incidence and mortality rates in Indonesia, a multi-stakeholder approach is needed. This includes strengthening health system capacity, increasing access to advanced treatment technologies, and addressing social, financial, cultural, and structural barriers to prevention and treatment. Therefore, The National Cervical Cancer Elimination Plan for Indonesia (2023-2030), was developed by the Ministry of Health as a strategy to accelerate Indonesia's progress towards the elimination of cervical cancer.[6]

The strategy was adapted in local community health center, including Andalas Community Health Center, which incorporated into Non-communicable Diseases (NCDs) program. Andalas Community Health Center's NCDs program includes productive-age screening in communities, schools, and other institutions with the intention of preventing NCDs and identifying risk factors early. The NCDs program with the lowest success rate was the implementation of NCDs risk factor screening in the population aged 15 to 59 years. The program only reached 33,001 of 33,203 people (99.39%). NCDs screening coverage at Puskesmas Andalas remains inadequate. The lowest

© 2025 Author. (CC BY) license.
Published by Faculty of Medicine Andalas University.

screening rates were found in cervical cancer (1.23%). Considering the urgency of intervening in the coverage of cervical cancer screening at Andalas Community Health Center, a health counseling and mass screening project was established as an effort to persuade and increase public awareness regarding the importance of early detection of cervical cancer.[7] A project with the name "SOSIALITA" *(Solusi Siap Atasi Tumor pada Wanita)* was established with the hope it could improve interest among reproductive-aged women.

Lack of knowledge can be improved by health promotion. This is in accordance with the theory of health behavior proposed by Lawrence Green. Lawrence states that there are three factors that influence changes in a person's health behavior, consisting of predisposing factors, supporting factors, and driving factors. Providing education with counseling and pocketbooks is a driving factor for health behavior change.[8] Education can be carried out using health promotion media which aims to encourage the learning process and serves as a teaching aid that can facilitate the receipt of health information. One of the media that can be used is counseling and pocket books, which are small-sized books that can be put in a pocket, easy to carry and contain information on a particular theme and are a guide for its users.[9] The SOSIALITA Pocket Book is an educational innovation to increase public understanding of the importance of cervical cancer screening. This book contains an identity sheet, a brief information sheet related to cervical cancer and cervical cancer screening including IVA test and HPV DNA screening and a logging page. The purpose of this log is to help patients monitor their health conditions and ensure that examinations are carried out regularly. It provides a well-documented examination history, making it easier for health workers to advise on next steps if needed. This study aimed to determine the general characteristics, evaluate the level of knowledge and attitude regarding cervical cancer screening test, and assess the impact of health promotion through counseling and SOSIALITA pocketbook on knowledge and attitude of reproductive-aged women in the working area of Andalas Health Care.

METHODS

This study is a pre-experimental study with one group pretest-posttest method. The population of this study is women of reproductive age in the working area of Andalas Community Health Center. The test was conducted by assessing the knowledge of women of reproductive age before and after being given a health counseling by experts from each gynecology and public health field, along with the SOSIALITA pocketbook (Figure 1). Respondents were determined by convenience sampling with the total of 25 respondents.

Data on women of reproductive age's knowledge and attitude towards early detection of cervical cancer were obtained by filling out a questionnaire. The questionnaire consists of 29 questions that are divided into two parts, i.e, 12 questions about knowledge and 17 questions about attitude. The knowledge questionnaire is assessed by giving a score of 1 for correct answers and 0 for wrong answers which are later categorized into low (0-7), average (8-9), and high (10-12). The attitude questionnaire is assessed by giving a score ranging from 1 to 4 determined from the attitude towards the statements expressed in the questionnaire. The attitude criteria are later categorized into 2 results, namely positive and negative attitude based on the mean average of the total score

© 2025 Author. (CC BY) license.
Published by Faculty of Medicine Andalas University.

https://doi.org/10.25077/aoj.9.2.241-250.2025

of the respondents. This questionnaire has been tested for validity and reliability by Farlina Batubara.

The data were analyzed with analytic comparative categorical concepts using McNemar Test for attitude and Marginal Homogeneity Test for knowledge. Data with p-value of <0.05 was considered statistically significant.



Figure 1. SOSIALITA Pocketbook

RESULT AND DISCUSSION

The research results obtained are based on questionnaires distributed and filled out by women of reproductive age in the working area of Andalas Community Health Center. The results of the questionnaire are as follows:

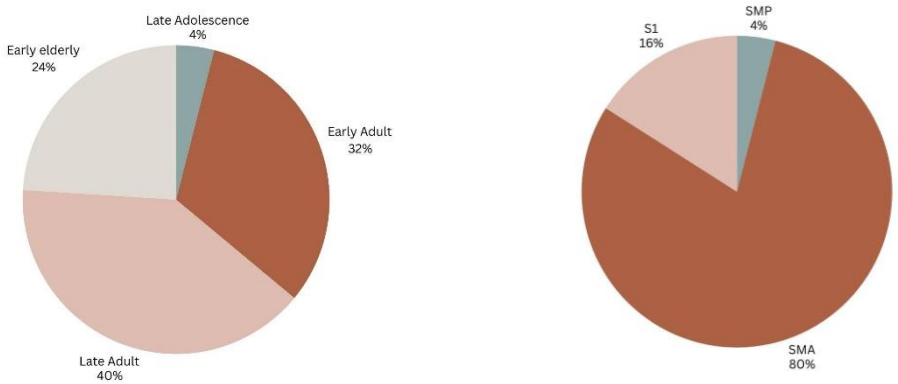


Figure 2. Characteristics Age and Education of Respondents. (a) Age, and (b) Education

© 2025 Author. (CC BY) license.
Published by Faculty of Medicine Andalas University.

https://doi.org/10.25077/aoj.9.2.241-250.2025

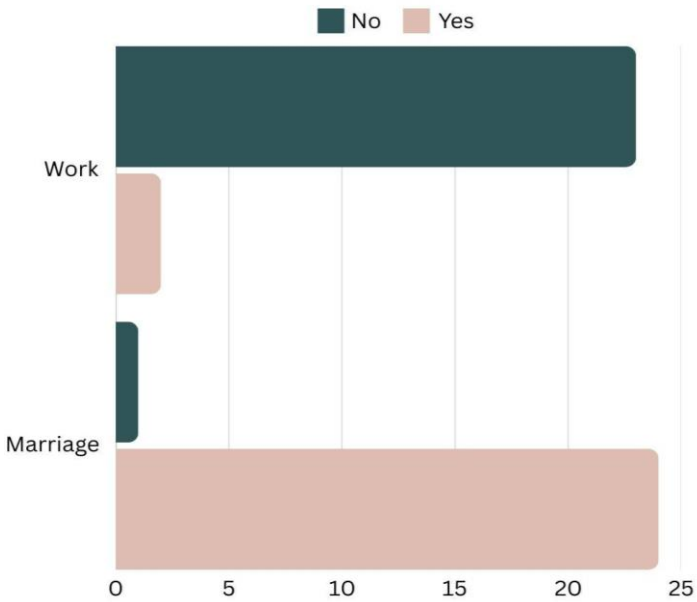


Figure 3. Characteristics marriage and work history of Respondents

Based on **Figure 2**, 10 (40%) women of reproductive age are in late adulthood (36-45 years), 20 (80%) women of reproductive age had a senior high school education. Based on **Figure 3**, 23 (92.0%) women of reproductive age are not working, and 24 (96,0%) are married.

Based on Figure 2, 40% of productive women are in the late adulthood stage, which is the target of the National Action Plan for Elimination of Cervical Cancer in Indonesia. The Ministry of Health of the Republic of Indonesia has issued a cancer elimination plan 2024-2034, one of which is cervical cancer. In this plan, women aged 30 to 69 years are targeted to undergo cervical screening with HPV DNA. This activity is targeted at productive age women to support the Indonesian Ministry of Health program.[6]

The level of understanding of the importance of cervical cancer screening is influenced by many factors, including the latest education history and employment history. Based on Figure 3, it was found that 92% of the sample did not work and 80% had the latest high school education level. According to Mubarak in So'o, *et al* (2022), fundamentally knowledge will continue to grow and vary according to the process of human experience. Several factors affect knowledge, namely age, education level, occupation, experience and exposure to information so that interventions are needed to increase the level of public understanding of the importance of cervical cancer screening through the VIA test and HPV DNA.[10]

© 2025 Author. (CC BY) license.
Published by Faculty of Medicine Andalas University.

https://doi.org/10.25077/aoj.9.2.241-250.2025

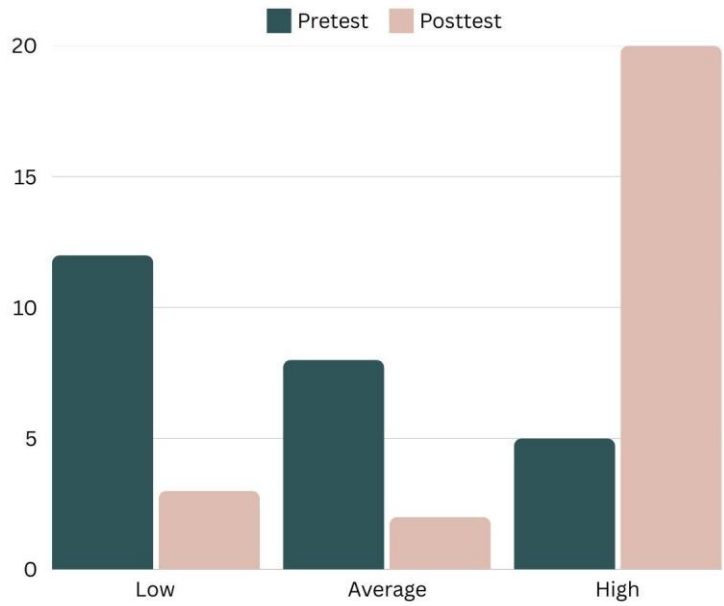


Figure 4. Frequency Distribution of Knowledge regarding IVA Test of the Respondents

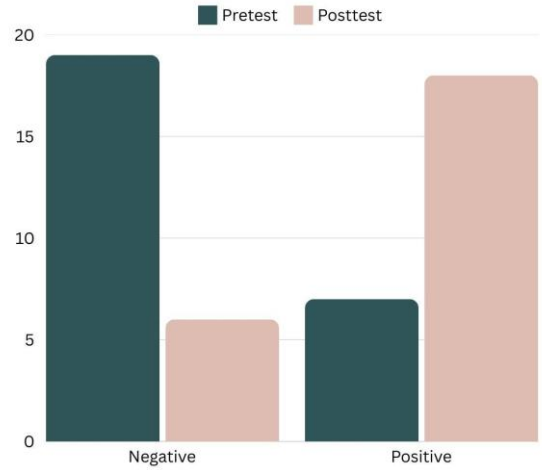


Figure 5. Frequency Distribution of Attitude regarding IVA Test of the Respondents

Figure 4 and 5. illustrates the category of knowledge and attitude of women of reproductive age participating in SOSIALITA. Based on responses from the pretest, the highest percentage obtained is low-level knowledge (48%) and negative attitude (76%). Based on the posttest results, a shift was found within the highest percentage to high-level knowledge (80%) and positive attitude (72%).

© 2025 Author. (CC BY) license.
Published by Faculty of Medicine Andalas University.

https://doi.org/10.25077/aoj.9.2.241-250.2025

Table 1. The Impact of Health Counseling and SOSIALITA Pocketbook on Reproductive-aged Women's Knowledge

Before	**After**				***P-Value (Marginal Homogeneity Test)***
	Low	Average	High	**Total**	
Low	3	1	8	12	0,001
Average	0	1	7	8	
High	0	0	5	5	
Total	3	2	20	25	

Table 1. Illustrate the impact of health counseling and SOSIALITA pocketbook on reproductive-aged women's knowledge. The result of data analysis test using *Marginal Homogeneity Test* indicates there is an impact of providing counseling and SOSIALITA pocketbook on knowledge of IVA screening with a significance level of 0,001 ($p<0,05$).

Table 2. The Impact of Health Counseling and SOSIALITA Pocketbook on Reproductive-aged Women's Attitude

Before	**After**			***P-Value (Mc Nemar Test)***
	Negative	Positive	**Total**	
Negative	5	14	19	0,004
Positive	2	4	6	
Total	7	18	25	

Table 2. illustrate the impact of health counseling and SOSIALITA pocketbook on reproductive-aged women's attitude. The result of data analysis test using *Mc Nemar Test* indicates there is an impact of providing counseling and SOSIALITA pocketbook on attitude regarding IVA screening with a significance level of 0,004 ($p<0,05$).

There was an increase in the level of knowledge of women of reproductive age regarding cervical cancer detection, namely from 48% of women who initially had a low level of knowledge increased to 80% of women in which finally had a high level of knowledge after being given counseling and accompanied by the SOSIALITA pocket book. This shift in knowledge level is one of the effects of providing counseling and pocketbooks as one of the health promotion efforts. According to Lawrence Green's theory, this counseling and pocket book is one of the reinforcing factors in improving health behavior. Based on research by Wijayanti et al. (2024) in Bantul, it was found that a series of counseling activities were effective in helping prevent cervical cancer by increasing knowledge about gynecological and reproductive health. It was found that with the

© 2025 Author. (CC BY) license.
Published by Faculty of Medicine Andalas University.

counseling more than 50% of the participants participated in cervical cancer screening activities which at that time performed pap smears.[11]

In line with research conducted by Adyani, et al. (2021) it is found that there was an increase in cadre knowledge in the good category after being given significant counseling with $p < 0.05$.[12] Selection of methods for health promotion must be adapted to our audience. The selection of the lecture method is adjusted to the number of targeted audiences of 15-40 people and accompanied by a pocket book full of animations so that participants get an audio and visual experience in receiving information.[13,14,15] The addition of book functioned to increase the sample's experience of cervical cancer information, namely visual in addition to the audio obtained from the lecture, because in accordance with Edgar Dale's Cone theory, the more five senses involved, the better the information that can be obtained.[13]

There was an increase from an initially dominated negative attitude of 76% to a positive attitude of 72%. The increase in the attitude of women of reproductive age is inseparable from the influence of the increased knowledge they have gained after the provision of counseling and pocketbooks. Knowledge affects a person's motivation, so that the better the function of the five senses, the more knowledge will increase, which in turn can generate a person's attitude.[14] Similar to Sri Suparti's research in 2018 on the effect of counseling on cervical cancer on the motivation of health cadres in early detection of cervical cancer, which found the results of an increase in attitude from the good category from 8 to 20 samples (58.83%) with a significant p value of $p < 0.05$.[16]

The study's limitations are firstly related to the variables assessed in the research. The knowledge and attitude variables are a part of predisposing factors in Lawrence-Green theory. Therefore, other factors such as reinforcing and enabling factors of behavioral theory were not assessed. Furthermore, this being a convenient sample, no prior power calculation had been made.

CONCLUSION

The results of the research that has been conducted on the knowledge and attitude of reproductive-aged women regarding cervical cancer early detection test can be concluded as follows: Most women of reproductive age in the working area of Andalas Health Center are in late adulthood, had a senior high school education, not working, and married. The results of the knowledge and attitude assessment showed that most women of reproductive age have low-level knowledge and negative attitude regarding cervical cancer early detection test. There is a significant relationship between health counseling and SOSIALITA pocketbook and reproductive-aged women's knowledge and attitude regarding cervical cancer early detection test.

© 2025 Author. (CC BY) license.
Published by Faculty of Medicine Andalas University.

REFERENCES

1. Kesehatan K, Indonesia R. Pedoman Nasional Pelayanan Kedokteran Tatalaksana Kanker Serviks. Jakarta. 2018.
2. HOGI. Pedoman Nasional Pelayanan Kedokteran Kanker Ginekologi. 2018.
3. World Health Organization. Cervical cancer. [Cited 2025 Feb 13]. Available From: https://www.who.int/news-room/fact-sheets/detail/cervical-cancer
4. Robbers GM, Bennett LR, Spagnoletti BR, Wilopo SA. Facilitators and barriers for the delivery and uptake of cervical cancer screening in Indonesia: a scoping review. Global Health Action. 2021 Jan 1;14(1):1979280.
5. Direktorat Pencegahan dan Pengendalian Penyakit Tidak Menular. Panduan Penatalaksanaan Deteksi Dini Kanker. Jakarta: Kemenkes RI; 2021.
6. D. M. Muthmainnah, B. I. Utama, and H. Yetti, "Association Between Mode of Delivery and Incidence of Overactive Bladder (OAB) in Community Health Centers in Padang," vol. 9, no. 1, pp. 63–73, 2025, doi: https://doi.org/10.25077/aoj.9.1.63-73.2025.
7. Kementerian Kesehatan Republik Indonesia. Rencana Kanker Nasional 2024-2034. Jakarta: Kementerian Kesehatan RI; 2024.
8. S. Adnani, Rizanda Machmud, and Dwiana Ocviyanti, "Collaborative Intervention Assistance Model In An Effort To Increase The Quality Of Pregnant Women Services To Reduce Maternal Mortality In Padang City," *Andalas Obstet. Gynecol. J.*, vol. 8, no. 2, pp. 667–674, Jul. 2024, doi: 10.25077/aoj.8.2.667-674.2024.
9. A. Novan, D. Saputra, D. M. Rizal, N. Septiyorini, and M. Nurhadi, "The Efficacy Of Platelet-Rich Plasma In Pelvic Floor Reconstruction Surgery : A Scoping Review Of Literature," pp. 675–692, doi: https://doi.org/10.25077/aoj.8.2.675-692.2024.
10. Puskesmas Andalas. Laporan Tahunan Puskesmas Andalas Tahun 2023; Padang. 2023.
11. Nadira, N. A., Amos, J., & Silaban, E. M. L. (2024). Pengembangan buku saku tentang stunting untuk wanita usia subur (WUS). Jurnal Riset Kesehatan, 16(2), 444–453.
12. Pakpahan M, Siregar D, Susilawaty A, Tasnim, Mustar, Ramdany R, et al. Promosi kesehatan & perilaku kesehatan. Watrianthos R, editor. Jakarta: EGC. Yayasan Kita Menulis; 2021.
13. So'o R, Ratu K, Folamauk C, Amat A. Faktor-faktor yang mempengaruhi pengetahuan masyarakat di Kota Kupang mengenai Covid-19. Cendana Medical Journal. 2022; 23(1):76-87.
14. Wijayanti A, Tiara D, Widayati S, Kharisma M. Pencegahan kanker serviks dengan penyuluhan dan pemeriksaan pap smear di Kedaton, Pleret, Bantul. JAMALI. 2024; 6(2):104-11.
15. F. A. Hasibuan and H. Yetti, "Relationship of Determinant Factors to Severity Level of Caesarean Section Based on The INA-CBGs System at Dr . M . Djamil Padang," vol. 9, no. 1, pp. 23–29, 2025, doi: https://doi.org/10.25077/aoj.9.1.23-29.2025.
16. Y. M. Sari and M. P. Sari, "Pelvic Floor Distress Inventory (PFDI - 20) - Physiopedia," *Andalas Obstet. Gunecology J.*, vol. 8, no. 2, pp. 693–702, 2024, doi: https://doi.org/10.25077/aoj.8.2.693-702.2024.
17. Adyani K, Sutrisminah E, Rosyidah H. Peningkatan pengetahuan tentang kanker serviks pada kader sebagai upaya peningkatan cakupan deteksi dini kanker serviks. JPKM. 2021; 6(6):609-15.
18. Susilowati D. Promosi Kesehatan. Vol. 1, Pusdik SDM Kesehatan. 2016.

© 2025 Author. (CC BY) license.
Published by Faculty of Medicine Andalas University.

19. Notoatmodjo S. Promosi kesehatan teori dan aplikasi. Rineka Cipta. 2010.
20. I. R. Burhan, M. Hasbi, A. Syukri, F. Nur, and F. Rahman, "Profile of Anemia Status in Adolescent Girls ; Case Study at SMP Negeri 27 Padang," vol. 9, no. 1, pp. 105–114, 2025, doi: https://doi.org/10.25077/aoj.9.1.105-114.2025.
21. A. Pramana, B. I. Utama, and H. Yetti, "Research Article The Relationship Of The Incident Of Metabolic Syndrome And Overactive Bladder In Female Patients," *Andalas Obstet. Gynecol. J.*, vol. 8, no. 1, pp. 538–547, 2024, doi: https://doi.org/10.25077/aoj.8.1.538-547.2024.
22. Suparti S. Pengaruh penyuluhan tentang kanker serviks terhadap motivasi kader kesehatan pada pemeriksaan deteksi dini kanker serviks. J Kebidanan. 2017; 8(1):70-80

© 2025 Author. (CC BY) license.
Published by Faculty of Medicine Andalas University.