

THE EFFECTIVENESS OF ACUPRESSURE ON THE HEGU AND SANYINJIAO POINTS FOR DYSMENORRHEA IN ADOLESCENTS

Maftuchah¹, Annisa Nurul Afifah², Mei Lia Zulis Windyarti³, Rose Nur Hudhariani⁴

^{1,2,3,4}Midwifery Departement, Karya Husada University Semarang, Indonesia

Corresponding Author: maftuchah@stikesyahoedsmg.ac.id

ABSTRACT

Dysmenorrhoea is lower abdominal pain caused by uterine muscle contractions and is a common problem among adolescents. In 2020, Indonesia reported that 64.25% of adolescents experienced dysmenorrhoea. Effective management is essential because dysmenorrhoea can negatively affect adolescents' daily activities and concentration during learning. One non-pharmacological technique that can be used is acupressure at the hegu (LI4) and sanyinjiao (SP6) points combined with lemon aromatherapy. This study aimed to analyse the effectiveness of acupressure at the LI4 and SP6 points combined with lemon aromatherapy in reducing primary dysmenorrhoea among adolescents. This quantitative study employed a quasi-experimental design with 36 respondents selected through purposive sampling. The intervention consisted of applying pressure to the LI4 and SP6 points for 30 minutes and administering lemon aromatherapy by diluting 3 drops of lemon essential oil in 10 ml of water, carried out once daily for two days starting from the onset of dysmenorrhoea. The results showed that acupressure at both the hegu and sanyinjiao points combined with lemon aromatherapy significantly reduced dysmenorrhoea, with no significant difference in effectiveness between the two points ($p = 0.486$). Schools support the use of acupressure and lemon aromatherapy as an accessible and non-pharmacological method to help adolescents manage dysmenorrhoea.

Keywords: Acupressure; Adolescents; Dysmenorrhoea; Lemon Aromatherapy.

Copyright © 2023 Authors



This work is licensed under a Creative Commons Attribution Share Alike 4.0 International License

INTRODUCTION

Adolescence is a period of developmental change from childhood to adulthood, accompanied by changes in biological, cognitive, and social aspects. However, it is not only physical and mental changes that occur; the reproductive system also undergoes gradual changes (Diananda, 2018). One of the signs of entering adolescence is menstruation. Menstruation is a sign that a woman is capable of bearing children. Menstruation can occur in adolescents aged 10-16 years, depending on various factors, including a woman's health, nutritional status, and weight relative to height. However, in reality, many women still experience menstrual problems, including dysmenorrhea, or what we often refer to as menstrual pain (Novita, 2018).

Dysmenorrhea in Indonesian refers to pain that occurs when women experience menstruation. Dysmenorrhea has various types

and levels of pain, ranging from mild to severe pain. Almost all women will experience pain in the lower abdomen during menstruation because the uterine muscles contract and relax. Generally, when the uterine muscles contract, there is no pain, but if the uterine muscles experience severe and frequent contractions, it can disrupt blood flow to the uterus, causing pain (Hudhariani et al., 2024).

Dysmenorrhea is classified into two types based on its cause: primary dysmenorrhea, which occurs naturally due to hormonal changes in the body, and secondary dysmenorrhea, which is menstrual pain caused by a disease. The World Health Organization (WHO) in 2020 stated that the number of adolescent girls experiencing dysmenorrhea was 1,769,425 (90%), with 10–16% of adolescent girls experiencing severe dysmenorrhea (Anggraini et al., 2022). In Indonesia alone, there is 64.25% of dysmenorrhea cases, with 54.89% being primary

dysmenorrhea and 9.36% being secondary dysmenorrhea (Syamsuryanita & Ikawati, 2022). Meanwhile, in Central Java, around 56% of adolescent girls experience dysmenorrhea (Ulfah et al., 2022).

Dysmenorrhea is caused by age at menarche, genetics and family history, BMI (body mass index), stress, nutritional status, unhealthy eating habits, poor eating habits, exercise habits, alcohol intake, smoking, physical factors, anemia, and others (Nurfadillah et al., 2021). These factors will have a very detrimental impact because adolescents will find it difficult to concentrate during learning, as they feel uncomfortable with their condition when experiencing menstrual pain, which can reduce learning achievement, lead to infertility, cyst rupture, and infection (Aprilla & Zurrahmi, 2021).

Therapies that can be used to treat dysmenorrhea include pharmacological and non-pharmacological therapies. Pharmacological therapy uses analgesic drugs to help relieve the pain caused by dysmenorrhea, such as aspirin, mefenamic acid, paracetamol, feminax, and non-steroidal anti-inflammatory drugs (NSAIDs). Meanwhile, non-pharmacological therapies include relaxation techniques, effleurage massage, aromatherapy, yoga, acupressure, and hot or cold compresses on the painful area (Misliani & Firdaus, 2019).

Acupressure is a Chinese treatment that uses pressure or massage on specific parts of the body to increase blood flow, open or narrow blood vessel blockages, stimulate nerve ganglia and nerve centers, and change gland function (Mufidah et al., 2022).

Pain can be reduced through acupressure techniques by increasing the production of endorphins, which are hormones that help the body relax naturally by blocking pain receptors in the brain. Endorphins are chemicals produced by the body to reduce pain. Endorphins also have effects similar to morphine, an opiate drug, on the pain-sensing areas of the brain (Revianti & Yanto, 2021). Several acupressure therapy points that can be used to reduce dysmenorrhea include the hegu point (LI4). The hegu point (LI4), located distally between the first and second metatarsals,

has the ability to alleviate pain due to pressure or massage, which can increase endorphin concentration in the blood and reduce pain (Anuhgera et al., 2023). Supported by research conducted by Ida Dwi Revianti et al., there was a difference in the level of menstrual pain in the experimental group after acupressure was applied to the hegu point (LI4), which decreased from moderate to mild (Revianti & Yanto, 2021).

In addition to acupressure on the hegu point (LI4), which can reduce dysmenorrhea, the sanyinjiao point (SP6) can also reduce dysmenorrhea. The sanyinjiao point is one of the meeting points of the spleen, liver, and kidney on the spleen meridian. It is located three fingers above the ankle behind the posterior edge of the tibia, which can improve blood circulation and blood supply (Puteri et al., 2024). This is in line with research conducted by Natalia et al., which showed a significant effect of acupressure therapy on the sanyinjiao point (SP6) in reducing the level of primary dysmenorrhea in adolescent girls with a p-value <0.05 (Natalia et al., 2020).

Application of acupressure on the hegu point (LI4) and acupressure on the sanyinjiao point (SP6) combined with lemon aromatherapy inhalation (Rompas et al., 2019). The main component of lemon is limonene (90%), which functions to regulate the prostaglandin hormone system. Therefore, inhaling lemon aromatherapy can help one feel more relaxed because alpha waves in the brain increase. Additionally, it can limit the prostaglandin hormone system, thereby reducing pain (Rambi et al., 2019). Many studies have shown that lemon aromatherapy can reduce dysmenorrhea. One such study, conducted by Meinika and Andriani, found a difference in the average level of dysmenorrhea in adolescent girls before and after lemon aromatherapy administered through inhalation, with a p-value <0.05 (Meinika & Andriani, 2022).

Based on the results of a preliminary study conducted by the researcher on adolescent girls at MA Abwabun Nurul Maghfiroh Mranggen, out of 50 students, 25 students (50%) rested by lying down while having their hands and feet massaged by teachers at the UKS to reduce dysmenorrhea. 15 students (30%) took analgesic

drugs such as paracetamol due to the limited availability of drugs in the school health unit, and 10 students (20%) applied warm compresses. However, the teachers at the school health unit did not know the exact locations of the pressure points that could reduce dysmenorrhea, so acupressure on the hegu (LI4) and sanyinjiao (SP6) points to reduce or eliminate menstrual pain was not performed.

Based on the above issues, researchers are interested in conducting research on non-pharmacological treatment with natural therapy. Therefore, the researchers intend to conduct research on "The effectiveness of acupressure on the hegu (LI4) and sanyinjiao point (SP6) acupressure combined with lemon aromatherapy on primary dysmenorrhea in adolescent girls at MA Abwabun Nurul Maghfiroh Mranggen."

METHOD

This research is quantitative with a quasi-experimental design, using a two-group pre-test post-test design. This research was conducted at MA Abwabun Nurul Maghfiroh Mranggen from May to September 2024. There are two independent variables used in this study, namely acupressure on the hegu point (LI4) and acupressure on the sanyinjiao point (SP6) in combination with lemon aromatherapy, and the dependent variable is dysmenorrhea. The research sample consisted of 36 adolescents using purposive sampling.

The research instruments used were the Numeric Rating Scale (NRS) pain observation sheet and SOP. The inclusion criteria were adolescents who were willing to be respondents, MA class X adolescents (10-16 years old), adolescents who experienced primary dysmenorrhea, adolescents who experienced mild to moderate pain with a pain scale of 1-6, and adolescents who had not received dysmenorrhea relief medication. The treatment was administered on the soft tissue between the index finger and thumb at the hegu acupressure point (LI4) and three fingers above the ankle at the sanyinjiao acupressure point (SP6), applying circular pressure with a depth of 1 cun or ½ thumb for 30 minutes, combined with lemon

aromatherapy diluted in 10 ml of water with 3 drops in a humidifier, then diffusing the vapor for 30 minutes. This was performed once daily for two consecutive days, starting on the first day of dysmenorrhea.

Prior to the study, an ethics review was conducted by the Research Ethics Committee (KEP) of Karya Husada University Semarang, with number 101/KEP/UNKAHA/SLE/VII/2024.

RESULTS

Table 1. Distribution of respondents based on dysmenorrhea in adolescents before and after receiving acupressure at the hegu point (LI4) combined with lemon aromatherapy (n=18)

Variabel	Mean	Median	SD	Min-max	P value
Before Intervention	3.33	3.50	0.54	2.5-4	0.000
After the Intervention	2.19	2.50	0.48	1.5-3	

Table 1 shows that primary dysmenorrhea in adolescents before receiving acupressure at the hegu point (LI4) combined with lemon aromatherapy had a mean of 3.33 (scale 3), a median of 3.50 (scale 4) with a standard deviation of 0.54, the lowest pain level of 2.5 (scale 3), and the highest pain level of 4. After the intervention, the mean value was 2.19 (scale 2), the median was 2.50 (scale 3) with a standard deviation of 0.48, the lowest pain was 1.5 (scale 2), and the highest pain was 3. The Wilcoxon test results for LI4 showed that the p-value was 0.000 < 0.05, so alternative hypothesis was accepted and null hypothesis was rejected, indicating that there was a difference before and after acupressure at the hegu point (LI4) combined with lemon aromatherapy for dysmenorrhea in adolescents at MA Abwabun Nurul Maghfiroh Mranggen.

Table 2. Distribution of respondents based on dysmenorrhea in adolescents before and after receiving acupressure at the sanyinjiao point (SP6) combined with lemon aromatherapy (n=18)

Variabel	Mean	Median	SD	Min-max	P value
Sebelum Intervensi	3.41	3.50	0.49	2.5-4	0.000
Sesudah Intervensi	2.33	2.50	0.45	1.5-3	

Table 2 shows that dysmenorrhea in adolescents before receiving acupressure at the sanyinjiao (SP6) point combined with lemon aromatherapy had a mean of 3.41 (scale 3), a median of 3.50 (scale 4) with a standard deviation of 0.49, the lowest pain score of 2.5 (scale 3), and the highest pain score of 4. After the intervention, the mean was 2.33 (scale 2), the median was 2.50 (scale 3) with a standard deviation of 0.45, the lowest pain was 1.5 (scale 2), and the highest pain was 3. The results of the Wilcoxon statistical test on SP6 showed that the p-value was 0.000 < 0.05, so alternative hypothesis was accepted and null hypothesis was rejected, indicating that there was a difference before and after acupressure on the sanyinjiao point (SP6) combined with lemon aromatherapy on dysmenorrhea in adolescents at MA Abwabun Nurul Maghfiroh Mranggen.

Table 3. Differences in the effectiveness of acupressure on the hegu point (LI4) and acupressure on the sanyinjiao point (SP6) combined with lemon aromatherapy on dysmenorrhea (n=18)

Variabel	Median	SD	P-value
Acupressure on the hegu point (LI4) combined with lemon aromatherapy	2.50	±48	0.486
Acupressure on the sanyinjiao point (SP6) combined with lemon aromatherapy	2.50	±45	

Table 3 shows the results of the Mann Whitney statistical test with a p value of 0.486 > 0.005, indicating that there is no significant difference between acupressure at the hegu point (LI4) and acupressure at the sanyinjiao point (SP6) with lemon aromatherapy on dysmenorrhea in adolescents during menstruation.

DISCUSSION

Based on the bivariate results using the Mann Whitney test, a p-value of 0.486 > 0.05 was obtained, which means that alternative hypothesis is rejected and null hypothesis is accepted, namely that there is no significant difference between acupressure on the hegu point (LI4) and acupressure on the sanyinjiao point (SP6) with lemon aromatherapy on dysmenorrhea. Acupressure on the hegu point (LI4) was performed between the index finger and thumb with circular pressure for 30 minutes, 15 minutes on the right hand and 15 minutes on the left hand. When pressure is applied, the nerve tissue stimulates the endocrine glands to release endorphins, which gradually relieve pain by increasing the body's own production of endorphins (Wulandari et al., 2024). Adolescents who experience dysmenorrhea are usually caused by stress and psychological disorders, so acupressure on the hegu (LI4) or large intestine points can overcome this problem because these points have the function of calming the mind and relieving anxiety (Hassan et al., 2020).

A combination of lemon aromatherapy dissolved in 10 ml of water with 3 drops in a humidifier, then vaporized for 30 minutes, is administered simultaneously with acupressure on the hegu point (LI4) (Revianti & Yanto, 2021). Lemon aromatherapy contains 90% limonene, which functions to limit the prostaglandin hormone system, thereby reducing pain and controlling cyclooxygenase I and II. When the vapor is inhaled, the neurons interpret the lemon aroma to the brain, which then sends a response in the form of aromatic compounds through the circulatory system to the entire body, causing the

body to become relaxed, calm, and happy (Putri & Anwar, 1945).

The results of this study are supported by research conducted by Mukhoirrotim (2018), which shows a decrease in pain intensity with an average reduction of 77.46%, meaning that acupressure on the hegu point (LI4) has been proven to reduce the intensity of dysmenorrhea (Wijayanti & Selviana, 2019). Another study conducted by Antri Ariani et al. (2023) found that the average level of dysmenorrhea after lemon aromatherapy decreased to 2.26% with a p-value of 0.000 ($p < 0.05$), thus it can be concluded that there is an effect of lemon aromatherapy on reducing dysmenorrhea (Ariani et al., 2023).

Meanwhile, acupressure on the Sanyinjiao (SP6) point is related to the spleen, liver, and kidneys. Acupressure on this point is performed by applying pressure around 3 fingers above the ankle in a circular motion for 30 minutes, namely 15 minutes on the right foot and 15 minutes on the left foot. When pressure is applied, the nerve tissue stimulates the endocrine system to release endorphins, which gradually eliminate pain by increasing the body's own production of endorphins. Acupressure on the Sanyinjiao (SP6) point has the function of strengthening the spleen, controlling the balance of Yin in the liver and kidneys so that blood circulation becomes smooth, which can reduce the feeling of dysmenorrhea (Revianti & Yanto, 2021).

Lemon aromatherapy contains 90% limonene, which functions to limit the prostaglandin hormone system, thereby reducing pain and controlling cyclooxygenase I and II (Mufidah et al., 2022). Therefore, the combination of acupressure on the sanyinjiao point (SP6) and lemon aromatherapy can accelerate the disappearance of dysmenorrhea by dissolving 3 drops of lemon aromatherapy in 10 ml of water in a humidifier and then emitting the vapor for 30 minutes (Nurse & Line, 2022).

The results of this study are supported by research conducted by Tyas, J.K., et al. (2018), which showed a median dysmenorrhea scale score of 5.00 before treatment and a median score of 3.00 after treatment, indicating that

acupressure on the Sanyinjiao point has an effect on the dysmenorrhea scale.

There was no significant difference between the two acupressure points because both are located on meridians that are equally effective in treating dysmenorrhea. In addition, when asked, respondents reported feeling comfortable after receiving acupressure on the hegu (LI4) and sanyinjiao (SP6) points in combination with lemon aromatherapy. This acupressure therapy, which involves massaging acupuncture points with the fingers, can stimulate the release of endorphins that promote relaxation and calmness, thereby reducing the dysmenorrhea experienced.

The difference in the dysmenorrhea scale is due to several factors, as each person's response to pain is different. There are several factors that can influence pain reduction, including the comfort provided during the intervention, psychological conditions such as anxiety when experiencing dysmenorrhea, activities performed, and food consumed, which can also influence the reduction of reduction in dysmenorrhea (Handayani, 2021).

The effectiveness of acupressure therapy on the hegu (LI4) and sanyinjiao (SP6) points combined with lemon aromatherapy can reduce pain sensations by increasing endorphin hormones, which naturally relax the body and block pain receptors to the brain. Additionally, acupressure therapy is safe to perform independently as long as the instructions are followed according to the Standard Operating Procedure.

CONCLUSION

There is an effect of acupressure on the sanyinjiao point (SP6) combined with lemon aromatherapy on dysmenorrhea in adolescents at MA Abwabun Nurul Maghfiroh Mranggen. There is an effect of acupressure on the sanyinjiao point (SP6) combined with lemon aromatherapy on dysmenorrhea in adolescents at MA Abwabun Nurul Maghfiroh Mranggen. There is no significant difference in effectiveness between acupressure on the hegu point (LI4) and acupressure on the sanyinjiao point (SP6) combined with lemon

aromatherapy on dysmenorrhea in adolescents at MA Abwabun Nurul Maghfiroh.

The school can provide education and information to adolescents by collaborating with health workers on the non-pharmacological treatment of dysmenorrhea by applying acupressure on the hegu point or acupressure on the sanyinjiao point combined with lemon aromatherapy. They can also provide facilities that support the application of acupressure on the hegu point (LI4) and sanyinjiao point combined with lemon aromatherapy.

Future researchers are encouraged to examine the long-term effects and evaluate the effects over several cycles (at least 3 months) to determine the consistency and durability of the effects.

REFERENCE

- Anggraini, M. A., Lasiaprillianty, I. W., & Danianto, A. (2022). *Diagnosis dan Tata Laksana Disminore Primer*. 49(4), 201–206.
- Anuhgera, D. E., Ritonga, N. J., & Sitorus, R. (2023). Terapi Penurunan Rasa Nyeri Disminore Primer Education Of Ginger Drink And Accupresure As Theraphy To Relieving Primary Disminorrhea. *Jurnal Pengmas Kestra (JPK)*, 3(1), 108–114.
- Aprilla, N., & Zurrahmi, Z. R. (2021). Hubungan Status Gizi Dan Umur Menarche Dengan Kejadian Disminore Pada Remaja Putri Di SMAN 2 Bangkinang. *Jurnal Ners Research & Learning In Nursing Science Hubungan Status Gizi Dan Umur Menarche Dengan Kejadian Disminore Pada Remaja Putri Di SMAN 2 Bangkinang*, 5(23), 32–37.
- Ariani, A., Mulyani, Y., & Rosifa. (2023). Pengaruh Pemberian Aromaterapi Lemon terhadap Penurunan Disminore pada Remaja Putri. *Jurnal Kebidanan Harapan Ibu Pekalongan*, 10, 126–133.
<https://doi.org/10.37402/jurbidhip.vol10.iss2.262>
- Diananda, A. (2018). Psikologi Remaja Dan Permasalahannya. *Jurnal Istighna*, 1(1), 116–133.
- Handayani, R. (2021). Faktor Yang Mempengaruhi Kejadian Disminorea Pada Remaja Putri Kelas X Di SMA Swasta Muhammadiyah 10 Rantauprapat Tahun 2020. *Journal Of Midwifery Senior*, 4.
- Hassan, R., Shady, A., Ibrahim, A., Seada, A., & Mostafa, M. F. (2020). *Effectiveness of Acupressure in the Reduction of Pain and Anxiety among Patients with Open Thoracotomy*. 8(2), 182–191.
<https://doi.org/10.12691/ajnr-8-2-7>
- Hudhariani, R. N., Gurnita, F. W., Maftuchah, M., & Wahyunik, S. I. (2024). Akupresur Dengan Pelvic Rocking Kombinasi Aromatherapy Lavender Mengurangi Disminore Siswa MTS NU 05 Sunan Katong. *Jurnal Kebidanan*, XVI(01), 1–12.
<https://doi.org/10.35872/jurkeb.v16i01.675>
- Meinika, H., & Andriani, L. (2022). Perbedaan Pemberian Aromaterapi Lemon Dan Aromaterapi Lavender Terhadap Nyeri Haid (Disminore) Pada Remaja Putri. *Jurnal Media Kesehatan*, 15(1).
- Mislani, A., & Firdaus, S. (2019). Penanganan Disminore Cara Farmakologi dan Nonfarmakologi. *Jurnal Citra Keperawatan Poltekkes Kemenkes Banjarmasin*, 7(1), 23–32.
- Mufidah, S., Kusumawardani, L. A., & Fadhilah, S. (2022). The Impact of Acupressure Intervention on The Decrease of Labor Pain in The First Stage : Systematic Literature Review Acupressure Titik SP6 , LI4 dan BL32 Mengurangi Nyeri Persalinan Kala I. *Jurnal MID-Z (Midwifery Zigot) Jurnal Ilmiah Kebidanan*, 5(May), 29–40.
<https://doi.org/10.56013/JURNALMIDZ.V5I1.1374>
- Natalia, W., Komalaningsih, S., Syarief, O., Wirakusumah, F. F., & Suardi, A. (2020). Perbandingan Efektivitas Terapi Akupresur Sanyinjiao Point dengan Teknik Relaksasi Nafas dalam untuk Menurunkan Nyeri Menstruasi pada Putri Remaja. *Jurnal JSK Sistem Kesehatan*, 5(71), 123–128.
- Novita, R. (2018). Correlation between Nutritional Status and Menstrual Disorders of Female Adolescent in SMA Al-Azhar Surabaya. *Jurnal Amerta Nutrition*, 172–181.
<https://doi.org/10.20473/amnt.v2.i2.2018.172-181>

- Nurfadillah, H., Maywati, S., & Aisyah, I. S. (2021). Faktor-Faktor Yang Berhubungan Dengan Kejadian Dismenore Primer Pada Mahasiswi Universitas Siliwangi. *Jurnal Kesehatan Komunitas Indonesia*, 17(1), 247–256.
- Nurse, C., & Line, A. (2022). *What is aromatherapy?* 1–4.
- Puteri, V. T. A., Maftuchah, & Saraswati, I. (2024). Pelvic Rocking And Acupressure Point Li 4 (Hegu) Against Disminore In Class X Texmaco Vocational Students. *Jurnal SMART Kebidanan*, 11(June), 18–22.
- Putri, A. D., & Anwar, Y. (1945). *Pengaruh Inhalasi Aromaterapi terhadap Nyeri Haid pada Remaja* 1. 29–49.
- Rambi, C. A., Bajak, C., & Tumbale, E. (2019). The Influence Of Lemon (Cytrus) Aromatherapy On The Reduce Dysmenorrhea In Female Students. *Jurnal Ilmiah Sesebanua*, 3, 27–34.
- Revianti, I. D., & Yanto, A. (2021). Teknik Akupresur Titik Hegu (LI4) Menurunkan Intensitas Nyeri Dismenore Pada Remaja. *Holistic Nursing Care Approach*, 1(1), 39. <https://doi.org/10.26714/hnca.v1i1.8265>
- Rompas, S., Gannika, L., Studi, P., Keperawatan, I., Kedokteran, F., & Ratulangi, U. S. (2019). Pengaruh Aromaterapi Lemon (Citrus) Terhadap Penurunan Nyeri Menstruasi Pada Mahasiswi Program Studi Ilmu Keperawatan Fakultas. *EJournal Keperawatan (e-Kp)*, 7.
- Syamsuryanita, & Ikawati, N. (2022). Perbedaan Pemberian Air Jahe Dan Air Kelapa Terhadap Penurunan Nyeri Haid Pada Remaja Putri Di Sman 3 Makassar. *Jurnal Inovasi Penelitian*, 2(9), 3089–3096.
- Ulfah, M., Dewi, K., Mustika, D. N., & Indrawati, N. D. (2022). Penyuluhan Tentang Dysmenorrhoe Di Panti Asuhan Ning Amriyah Supardo Kendal. *Jurnal Pengabdian Masyarakat Kebidanan*, 4(1), 1–5.
- Wijayanti, H., & Selviana. (2019). Akupresure Sanyinjiao Point Mampu Menurunkan Intensitas Nyeri Dismenorhea Primer Acupressure Sanyinjiao Point Is Able To Reduce Intensity Of Primary Dismenore Pain. *Jurnal SMART Kebidanan*, 5(2), 70–76.
- Wulandari, L., Safitri, R., & Purwati, A. (2024). Pengaruh teknik akupresure titik hegu (Li 4) terhadap intensitas nyeri haid (dismenorre primer) pada remaja putri usia 13-15 tahun di MTs Al-Khalifah Kepanjen. *Journal of Public Health Innovation*, 4(02), 484–490. <https://doi.org/10.34305/jphi.v4i02.1098>