**THE EFFECT OF THE EFFECTIVENESS OF RED GINGER AND L14 ACUPRESSURE ON (PRIMARY DYSMENORRHOEA) IN FOURTH SEMESTER STUDENTS OF D III MIDWIFERY STUDY PROGRAM STIKES MARANATHA KUPANG**

**Brigita Dina Manek 1, Nabilah Nurul Ilma2, Atalia Pili Mangngi3**

**Maria M.T Duka4, Avelina P. Gusman5**

1STIKES Maranatha Kupang NTT Prodi D-III Kebidanan

Jl. KAMP. BAJAWA NASIPANAF - BAUMATA BARAT – KAB. KUPANG

e-mail : [brigitamanek@gmail.com](mailto:brigitamanek@gmail.com), [nabilahnurul86@gmail.com](mailto:nabilahnurul86@gmail.com), [ataliapm90@gmail.com](mailto:ataliapm90@gmail.com)

[mariamtduka@gmail.com](mailto:mariamtduka@gmail.com), [avelindo14@gmail.com](mailto:avelindo14@gmail.com)

## ABSTRAK

Nyeri menstruasi umum dirasakan oleh perempuan pada hari pertama menstruasi. Berdasarkan hasil survey awal yang dilakukan di STIKes Maranatha Kupang Prodi D-III Kebidanan 1 (10%) orang yang mengalami *dismenorea* ringan, 7 (70%) orang mengalami *dismenorea* sedang, 2 (20%) orang yang mengalami *dismenorea* berat, 2 (20%) orang yang mengalami *dismenorea* sangat berat setiap bulannya*.* Tujuan dari penelitian ini adalah untuk mengetahui perbedaan efektivitas antara jahe merah dengan Akupresur L14 terhadap nyeri haid (*dismenorea primer)* pada mahasiswa di STIKes Maranatha Kupang Prodi D-III Kebidanan. Rancangan yang digunakan dalam penelitian ini adalah *analitik komparatif* dengan pendekatan *observasional.* Populasi penelitian seluruh mahasiswa yang mengalami *dismenorea primer* dan tidak sedang menggunakan obat penghilang nyeri. Sampel sebanyak 32 responden diambil secara *accidental sampling.* Instrument yang digunakan adalah lembar penilaian skala nyeri *NRS Bourbanis*,. Penelitian ini dilakukan di STIKes Maranatha Kupang Prodi D-III Kebidanan. Hasil pretest kelompok jahe merah menunjukkan sebagian besar responden (56%) 9 responden mengalami nyeri ringan, sedangkan hasil post test menunjukkan hampir seluruh responden (81%) 13 responden mengalami nyeri ringan. Hasil pretest kelompok Akupresur L14 menunjukkan sebagian besar responden (75%) 12 responden mengalami nyeri sedang, sedangkan hasil post test menunjukkan hampir seluruh responden (81%) 13 responden mengalami nyeri ringan. Dengan uji statistic *Mann-Whitney Test* hasil menunjukkan ρ\_value = 0,030 < (α) 0,05. Maka dapat disimpulkan bahwa H0 ditolak dan H1 terima artinya ada perbedaan efektifitas yang signifikan antara sesudah konsumsi jahe merah dan akupresure L14 terhadap ***i****ntensitas* nyeri haid pada mahasiswa Prodi D-III Kebidanan di STIKes Maranatha Kupang. Diharapkan hasil penelitian ini dapat dijadikan alternatif pilihan untuk mengatasi/mengurangi *intensitas* nyeri haid *(dismenorea primer)* pada mahasiswa tanpa harus menggunakan obat kimia.

## ABSTRACT

Menstrual pain is commonly felt by women on the first day of menstruation. Based on the results of an initial survey conducted at STIKes Maranatha Kupang D-III Midwifery Study Program 1 (10%) people who experience mild dysmenorrhoea, 7 (70%) people experience moderate dysmenorrhoea, 2 (20%) people who experience severe dysmenorrhoea, 2 (20%) people who experience very severe dysmenorrhoea every month. The purpose of this study was to determine the difference in effectiveness between red ginger and L14 acupressure on menstrual pain (primary dysmenorrhoea) in students at STIKes Maranatha Kupang D III Midwifery Study Program. The design used in this study was comparative analytics with an observational approach. The study population was all students who had primary dysmenorrhoea and were not taking painkillers. A sample of 32 respondents was taken by accidental sampling. The instrument used is the NRS Bourbanis pain scale assessment sheet. This research was conducted at STIKes Maranatha Kupang D-III Midwifery Study Program. The pretest results of the red ginger group showed that most respondents (56%) 9 respondents experienced mild. pain, while the post test results showed almost all respondents (81%) 13 respondents experienced mild pain. The pretest results of the L14 Acupressure group showed that most respondents (75%) 12 respondents experienced moderate pain, while the post test results showed almost all respondents (81%) 13 respondents experienced mild pain. With the statistical test Mann-Whitney Test the results show ρ\_value = 0.030 < (α) 0.05. So it can be concluded that H0 is rejected and H1 is accepted, meaning that there is a significant difference in effectiveness between after consumption of red ginger and L14 on the intensity of menstrual pain in students of D-III Midwifery Study Program at STIKes Maranatha Kupang. It is hoped that the results of this study can be used as an alternative option to overcome / reduce the intensity of menstrual pain (primary dysmenorrhoea) in students without having to use chemical drugs.

**Keywords** :Adolescence, Primary Dysmenorrhoea, Red Ginger, Acupressure L14

1. **INTRODUCTION**

Dysmenorrhea is one of the most common gynecological complaints in women and almost all women experience uncomfortable sensations during menstruation, discomfort in the lower abdomen, lower back and even to the thighs. This condition affects 60-70% of women who menstruate. Dysminorea experienced by adolescents is stiffness or spasms in the lower abdomen. It feels very unpleasant such as irritability, irritability, nausea, vomiting, weight gain, flatulence, back pain, headaches, acne, tension, lethargy, and depression. Usually this symptom comes the day before menstruation and lasts for 2 days until the end of the menstrual period.

The incidence of menstrual pain in the world is very large. On average more than 50% of women in each country experience menstrual pain. The percentage rate in America is around 60% and in Sweden around 72%. While in Indonesia the figure is estimated at 55% of women of productive age who are tormented by pain during menstruation. The incidence (prevalence) of menstrual pain ranges from 45 – 95% among women of productive age.

Dysmenorrhoea can be treated with pharmacological and non-pharmacological therapies. Pharmacological therapies include the administration of analgetic drugs, hormonal therapy, prostaglandin nonsteroidal drugs, and cervical canal dilatation (Prawirohardjo, 2009). While non-pharmacological therapies that can be done to treat menstrual pain are herbal treatment, the use of supplements, medical treatments, relaxation, hypnotherapy and acupuncture. Herbal therapy can be done by using traditional medicine derived from plant ingredients. Some plant ingredients are believed to reduce pain, namely, cinnamon, soybeans, cloves, turmeric, ginger, oso dresie, Chinese herbs.

Ginger is as effective as mefenamic acid and ibuprofen for reducing pain in women with menstrual pain or primary dysmenorrhoea (Anurogo & Wulandari, 2011). Ginger contains substances that are efficacious in relieving pain and nausea during menstruation. Red ginger is a variant of ginger that is very suitable for herbs with a higher content of essential oils and oleoresins than other ginger variants, therefore usually red ginger can be used for traditional medicine and the most widely given is in the form of ginger drinks. . Red ginger or the Latin name (Zingiber officinale Roscoe) has a red and smaller rhizome, red ginger has a fairly high essential oil content (Ramadan, 2013). The chemical content of gingerol in red ginger is able to block prostaglandins so that it can reduce pain during menstruation.

Nonpharmacological therapy is recommended with supplement therapy, herbal therapy, traditional Chinese medicine therapy, one of which can use acupressure therapy. The lack of research that examines the effectiveness of acupressure therapy and the lack of application of research-based scientific methodology are reasons for researchers to examine more deeply the effectiveness of acupressure therapy in dealing with dysmenorrhoea pain. Several previous studies have stated that acupuncture therapy at LI 4 and ST 36 points can reduce the intensity of dysmenorrhoea pain (Sari & Usman, 2021). Furthermore, research on acupressure therapy given at the sanyinjiao point for 20 minutes can reduce the intensity of dysmenorrhoea pain of VIII semester nursing students of Udayana University (Efriyanthi, Suardana, & Suari, 2015).

Dysmenorrhea needs to be overcome so that young women who are experiencing dysmenorrhea can move like young women who are not menstruating. To overcome dysmenorrhea can be done non-pharmacologically or naturally. One of them is acupressure Acupressure uses the hands to massage certain parts of the body. Points associated with menstrual pain, Because acupressure can improve blood circulation, so that prostaglandins flow in the blood circulation and do not accumulate in the uterus and can eventually reduce menstrual pain / dysmenorrhea. Acupressure is also easy to apply without spending a considerable amount of money.

1. **RESEARCH METHODS**

The research method uses experimental research design techniques, based on the place of research including the type of field research design, data collection methods including the type of observational research design, based on the presence or absence of treatment including the type of experimental quasy research design two group comparrison pre test post test design, based on research objectives including comparative analytical research design, Based on data sources including primary research design. The population in this study was Semester IV Students of D III Midwifery Study Programwho experienced Primary Dysmenorrhoea and were not using painkillers as many as 32 respondents divided into N1: 16 respondents, N2: 16 respondents. The sampling technique used in this study was accidental sampling. The research material used in this study was primary data of students who experienced primary dysmenorrhoea and were given red ginger. The instruments used in this researcher were observation sheets and NRS Bourbanis pain scale assessment sheets

1. **RESULTS**
   1. **Characteristics of respondents based on the intensity of menstrual pain (primary dysmenorrhoea) before consumption of Red Ginger in Semester IV Students of D III Midwifery Study Program at STIKes Maranatha Kupang**

Table 1 Frequency Distribution of menstrual pain intensity before consumption of Red Ginger in Semester IV Students of D III Midwifery Study Program STIKes Maranatha Kupang

|  |  |  |
| --- | --- | --- |
| Pain Intensity | Frequency | Percentage (%) |
| No Pain | 0 | 0 % |
| Mild pain | 9 | 56% |
| Moderate pain | 6 | 38% |
| Severe Controlled Pain | 1 | 6% |
| Uncontrolled severe pain | 0 | 0% |
| Total | 16 | 100% |

Based on table 5.3 above, it can be interpreted that most respondents before consumption of red ginger had mild pain intensity, namely 9 respondents (56%).

* 1. **Characteristics of respondents based on the intensity of menstrual pain (primary dysmenorrhoea) before being given of L14 Acupressure therapy** **in Semester IV Students of D III Midwifery Study Program STIKes Maranatha Kupang**

Table 2 Frequency Distribution of Menstrual Pain Intensity After being given of L14 Acupressure therapy in Semester IV Students of D III Midwifery Study Program Midwifery STIKes Maranatha Kupang

|  |  |  |
| --- | --- | --- |
| Pain Intensity | Frequency | Percentage (%) |
| No Pain | 0 | 0 % |
| Mild pain | 13 | 81% |
| Moderate pain | 3 | 19% |
| Severe Controlled Pain | 0 | 0% |
| Uncontrolled severe pain | 0 | 0% |
| Total | 16 | 100% |

Based on table 5.4 above, it can be interpreted that almost all respondents after being given of L14 Acupressure therapy in students who experienced mild pain intensity as many as 13 respondents (81%).

* 1. **Analysis of differences in menstrual pain intensity before and after consumption of red ginger in Semester IV Students of D III Midwifery Study Program STIKes Maranatha Kupang**

Table 3 Cross-tabulation of menstrual pain intensity before and after consumption of red ginger in Semester IV Students of D III Midwifery Study Program STIKes Maranatha Kupang.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Pain Intensity | Before treatment | | After treatment | |
| Frequency | Percentage (%) | Frequency | Percentage (%) |
| No Pain | 0 | 0% | 0 | 0% |
| Mild pain | 9 | 56% | 13 | 81% |
| Moderate pain | 6 | 38% | 3 | 19% |
| Severe Controlled Pain | 1 | 6% | 0 | 0% |
| Uncontrolled severe pain | 0 | 0% | 0 | 0% |
| Total | 16 | 100% | 16 | 100% |
| p- *value*= 0,000 |  |  |  | α =0,005 |

Based on table 3 above, it can be interpreted that the difference in the intensity of menstrual pain before and after consumption of Red Ginger in Semester IV Students of D III Midwifery Study Program almost all respondents experienced a decrease in pain, namely mild pain as many as 13 respondents (81%).

Based on the results of statistical tests using the Wilcoxon Signed Ranks Test, it is known that almost all respondents experienced a decrease in pain intensity, only one respondent had a fixed pain intensity. The magnitude of the significant value is 0.000 with α 0.05. Because of the significance value of < α, H0 was rejected and H1 was accepted, which means that there is a difference in the intensity of menstrual pain in studentsbefore and after consumption of red ginger in Semester IV Students of D III Midwifery Study Program STIKes Maranatha Kupang.

* 1. **Analysis of differences in intensity before and after being given L14 Acupressure therapy to Semester IV Students of the D III Midwifery Study Program at STIKes Maranatha Kupang**

Tabel 3 Cross-tabulation of menstrual pain intensity before and after being given of L14 Acupressure therapy in Semester IV Students of D III Midwifery Study Program STIKes Maranatha Kupang.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Pain Intensity | Before treatment | | After treatment | |
| Frequency | Percentage (%) | Frequency | Percentage (%) |
| No Pain | 0 | 0% | 1 | 6% |
| Mild pain | 4 | 25% | 13 | 81% |
| Moderate pain | 12 | 75% | 2 | 13% |
| Severe Controlled Pain | 0 | 0% | 0 | 0% |
| Uncontrolled severe pain | 0 | 0% | 0 | 0% |
| Total | 16 | 100% | 16 | 100% |
| p- *value* = 0,001 |  |  |  | α =0,005 |

Based on table 3 above, it can be interpreted that the difference in the intensity of menstrual pain before and after giving L14 acupressure therapy for fourth semester students of D III Midwifery Study Program STIKes Maranatha Kupang. Almost all respondents experienced a decrease in pain, namely mild pain as many as 13 respondents (81%) and a small number of respondents did not experience pain, namely 1 respondent (6%).

Based on the results of statistical tests using the Wilcoxon Signed Ranks Test, it is known that almost all respondents experienced a decrease in pain intensity, only one respondent had a fixed pain intensity. Besarnya nilai signifikan 0,001 dengan α 0,05. The magnitude of the significant value is 0.001 with α 0.05. Because of the significance value of < α, H0 is rejected and H1 is accepted, which means that there is a difference in the intensity of menstrual pain in studentsbefore and after consumption of Acupressure L14 Students of Semester IV D III Midwifery Study Program Midwifery STIKes Maranatha Kupang.

* 1. **Analysis of the difference in menstrual pain intensity after consumption of Red Ginger and L14 Acupressure in Semester IV Students of D III Midwifery Study Program STIKes Maranatha Kupang.**

Tabel 4 Cross-tabulation of menstrual pain intensity after consumption of Red Ginger and L14 Acupressure in Semester IV Students of D III Midwifery Study Program STIKes Maranatha Kupang.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Pain Intensity | After Red Ginger treatment | | After L14 Acupressure treatment | |
| Frequency | Percentage (%) | Frequency | Percentage (%) |
| No Pain | 0 | 0% | 1 | 6% |
| Mild pain | 13 | 81% | 13 | 81% |
| Moderate pain | 3 | 19% | 2 | 13% |
| Severe Controlled Pain | 0 | 0% | 0 | 0% |
| Uncontrolled severe pain | 0 | 0% | 0 | 0% |
| Total | 16 | 100% | 16 | 100% |
| p- *value* = 0,030 |  |  |  | α =0,005 |

Based on the results of statistical tests using the Mann-Whitney Test statistical test, it is known that the magnitude of the significant value is 0.030 with (α) 0.05. Because of the significance value of < α, H0 was rejected and H1 was accepted, which means that there is a difference in the effectiveness of reducing menstrual pain intensity in students after consumption of red ginger and Acupressure therapy in Semester IV Students of D III Midwifery Study Program STIKes Maranatha Kupang.

Reducing the intensity of menstrual pain using L14 Acupressure therapy is more effective than consuming red ginger in research in the fourth semester of D III Midwifery Study Program Students of STIKes Maranatha Kupan

1. **DISCUSSION**

**Intensity of menstrual pain (primary dysmenorrhoea) before consumption of Red Ginger in Semester IV Students of D III Midwifery Study Program STIKes Maranatha Kupang**

Based on the results of the study, it showed that 16 respondents in the fourth semester of D III Midwifery Study Programof STIKes Maranatha Kupang had experienced pain during menstruation. With the intensity of most 56% mild pain, 38% moderate pain and 6% severe pain. A number of these respondents will be given red ginger. With reference to the NRS Bourbanis pain scale, the average result of menstrual pain intensity before consumption of red ginger is 3.6875.

In this study there were mostly respondents with mild pain. The intensity of this pain is commonly felt by every young woman who is not experiencing abnormalities or diseases, such as uterine infections, cysts, tumors, or uterine position abnormalities that usually occur in adulthood. This pain disorder usually occurs in the first 24 hours before menstrual bleeding. This symptom does not harm. When menstruation comes, it does not cause too much pain, even after the first day of menstruation, this pain will feel better and over time it can disappear. To overcome this pain, some people have used painkillers when going to menstruation or when experiencing menstrual pain (Primary Dysmenorrhoea)

**Intensity of menstrual pain (primary dysmenorrhea) before being given L14 Acupressure therapy to Semester IV Students of D III Midwifery Study Program STIKes Maranatha Kupang**

Based on the results of the study, it showed that from 16 respondents in the fourth semester of D III Midwifery Study Program STIKes Maranatha Kupang who experienced pain during menstruation, after being given L14 Acupressure there was a change. The intensity of pain that respondents almost all (81%) became mild pain, 19% moderate pain and no severe pain. After being given L14 acupressure, the average result of menstrual pain intensity is 2.3125.

Acupressure is a form of physiotherapy that provides massage and stimulation at specific points on the body (energy flow lines or meridians) to lower pain and has proven beneficial for disease prevention.

Acupressure is a Chinese medicine that has been known since thousands of years ago and by applying pressure or massage and stimulating certain points in the body. Basically, acupressure therapy is a development of acupuncture techniques, but the medium used is not needles, but fingers or blunt objects. The goal is to stimulate the natural ability to heal oneself by restoring the body's positive energy balance.

**Differences in menstrual pain intensity Before and after consumption of red ginger in Semester IV Students of D III Midwifery Study Program STIKes Maranatha Kupang**

Based on the results of statistical tests using the Wilcoxon Signed Ranks Test statistical test, it is known that almost all respondents, namely 15 people, experienced a decrease in pain intensity, only one respondent had a fixed pain intensity and none of them experienced an increase in pain intensity. It is obtained that the significant value ρ- value of 0.000 is < α (0.05) which shows that the difference is significant. So from the comparison of the two events before and after consuming red ginger is that there is a difference in the intensity of menstrual pain.

It can be concluded temporarily that there is a significant or noticeable difference in the intensity of menstrual pain (primary dysmenorrhoea) in studentsbefore and after consumption of red ginger in Semester IV Students of D III Midwifery Study Program STIKes Maranatha Kupang. By consuming red ginger will affect the intensity of menstrual pain can be reduced mildly.

**Analysis of differences in intensity before and after being given of L14 Acupressure therapy in Semester IV Students of D III Midwifery Study Program STIKes Maranatha Kupang**

The average value after giving L14 Acupressure is 1,500 which is less than the average value before before being given L14 Acupressure therapy is 3,625. The difference in pain intensity was 2.125. This shows that after giving L14 Acupressure therapy is better when compared to before before being given L14 Acupressure therapy because the level of menstrual pain intensity after giving L14 Acupressure is lighter (reduced) even becomes painless when compared to the level of menstrual pain intensity before being given L14 Acupressure therapy.

According to researchers during research with Acupressure to studentsby pressing the massage location at a location located 4 fingers above the inner ankle, the massage location was pressed for 30 counts Location located on the back of the hand on the highest protrusion, thumb and forefinger closed, massage location pressed for 30 counts and Location located 4 fingers under the kneecap on the outer edge of the shin, The massage location is pressed for 30 counts. Acupressure is done for 2 days and waits for the results of pain intensity for up to 30 minutes, respondents feel relaxed and reduce menstrual pain in the abdomen originating from uterine cramps that occur during menstruation and some respondents who cannot do activities can return to activities

**Analysis of the difference in menstrual pain intensity after consumption of Red Ginger and L14 Acupressure in Semester IV Students of D III Midwifery Study Program STIKes Maranatha Kupang.**

Based on the results of statistical tests using the Mann-Whitney Test, it is known that the magnitude of the significant value ρ-value 0.030 is < (α) 0.05, indicating that the difference in effectiveness is significant or real, so from the comparison of the two events of effectiveness of reducing the intensity of menstrual pain after consuming red ginger and L14 acupressure there is a differenceIn this study it can be stated that there is a significant difference in effectiveness. After acupressure therapy, L14 is more effective when compared to after consumption of red ginger against reducing the intensity of menstrual pain (primary dysmenorrhoea) in Semester IV Students of D III Midwifery Study Program STIKes Maranatha Kupang.

The importance of dysmenorrhea needs to be overcome so that young women who are experiencing dysmenorrhea can move like students who are not menstruating. To overcome dysmenorrhea can be done non-pharmacologically or naturally. One of them is with acupressure and ginger drink. Because acupressure can improve blood circulation, so that prostaglandins flow in the blood circulation and do not accumulate in the uterus and can eventually reduce menstrual pain / dysmenorrhea. Acupressure is also easy to apply without spending a considerable amount of money. Red Ginger drink can also overcome dysmenorrhea because ginger contains essential oils that are high enough and the chemical content of gingerol in ginger is able to block prostaglandins so that it can reduce pain during menstruation. Ginger is also easy to find and without spending a considerable amount of money.

1. **CONCLUSION**

The conclusion in this study is There is an Effectiveness of Red Ginger Drink Against Reducing the Intensity of Menstrual Pain / Dysmenorrhea in Students because Ginger contains essential oils and gingerol content in ginger is able to block prostaglandins so that it can reduce menstrual pain. Ginger has natural anti-inflammatory properties that effectively reduce pain. There is an Effectiveness of Acupressure Against Reducing the intensity of menstrual pain / Dysmenorrhea in Students because Acupressure can improve blood circulation so that prostaglandins flow in the blood circulation and do not accumulate in the uterus. There is a Difference in the Effectiveness of Acupressure and Ginger Drink Against reducing the intensity of menstrual pain / Dysmenorrhea Students of Semester IV Study Program D III Midwifery STIKes Maranatha Kupang.

1. **BIBLIOGRAPHY**

Aspiani, R. (2017). Buku Ajar Asuhan Maternitas Aplikasi Nanda Nic-Noc. Jakarta: CV Trans Info Media.

Hasanah. (2014). Efektivitas Akupresur terhadap Dismenore pada Remaja Putri. Efektifitas Akupresur dan Minuman Jahe terhadap Pengurangan Intensitas Nyeri Haid/Dismenore Pada Remaja Putri, 1-6.

Irianto, K. (2015). Kesehatan Reproduksi (Reproductive Health Teori & Praktikum). Pengaruh Akupresur dengan Teknik Tuina terhadap Pengurangan Nyeri Haid (Dismenore) pada Remaja Putri, 73-81.

Komariyah, S. &. (2017). Metodologi Penelitian Kualitatif. Bandung: Alfabet

Nugroho, T. (2015). Buku Ajar Ginekologi untuk Mahasiswa Kebidanan. Pengaruh Akupresur dan Teknik Tuina terhadap Pengurangan Nyeri Haid (Dismenore) pada Remaja Putri, 7381.

Nurgiwiati, E. (2018). Terapi Alternatif & Komplementer Dalam Bidang Keperawatan (1 st ed). Bogor: IN MEDIA

Nursalam. (2016). Metode Penelitian Ilmu Keperawatan. Jakarta: Salemba Medika.

Sari, I. D., & Listiarini, U. D. (2021). Efektivitas Akupresur dan Minuman Jahe terhadap Pengurangan Intensitas Nyeri Haid/Dismenore Pada Remaja Putri. Jurnal Ilmiah Universitas Batanghari Jambi, 21(1), 215–220. <https://doi.org/10.33087/jiubj.v21i1.1154>

Setyowati, H. (2018). Akupresur untuk kesehatan wanita berbasis hasil penelitian. Efektivitas Akupresur dan Minuman Jahe terhadap Pengurangan Intensitas Nyeri Haid/Dismenore Pada Remaja Putri, 215-220.

Arfiana, I. (2014). Pengaruh Minuman Jahe Merah (Zingiber Officinale Roscoe) Terhadap Intensitas Nyeri Haid pada Mahasiswa D-IV Kebidanan STIKes Ngudi Waluyo, 1-8.

Usmle. (2018). Obstetrics And Gynecology. Pengaruh Akupresur Pada Titik Tai Chong Dan Guanyuan Terhadap Penurunan Intensitas Nyeri Haid (Dismenorhea) Pada Remaja Putri, 54-62.

Utari, M.D., (2015). Pengaruh Pemberian Ramuan Jahe Terhadap Nyeri Haid Mahasiswa Stikes PMC Tahun 2015, 0-10.

Yuniati, M., & Mareta, R. (2019). Akupresur Titik Hequ Point Efektif Mengurangi Disminore Pada Remaja SMP, 301–11.