

LITERATUR REVIEW : THE EFFECT OF THIBBUN NABAWI (CUPPING THERAPY AND ACUPUNCTURE) ON REDUCING THE INTENSITY OF DYSMENORRHEA PAIN

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Abstract

Menstruation is a process where the uterine lining decays. Menstruation often occurs during childbearing age, it is not uncommon for discomfort to be felt, one of which is *dysmenorrhea*. Dysmenorrhea is pain in the abdomen due to uterine cramps and menstrual blood disorders. Several therapies that can be used to reduce dysmenorrhea pain include pharmacological and non-pharmacological methods. Pharmacological therapy is taking ibuprofen, mefenamic acid and other drugs. However, giving pharmacological therapy can cause adverse side effects. Therefore, it can be pursued by using non-pharmacological treatment to minimize the occurrence of side effects. Thibbun nabawi is one of the methods of treatment that was sunnah by Rasulullah SAW. These methods include cupping therapy, and acupuncture. The purpose of this study was to determine the effect of using Thibbun Nabawi, namely cupping and acupuncture on reducing the intensity of *dysmenorrhea pain*. This literature review was compiled by searching and collecting national and international research articles using a database *Google scholar*, *Pubmed*, and *Sciencedirect*. The search was carried out using predetermined keywords and obtained 8 appropriate journals. From this study the results showed that there was an effect of using Thibun Nabawi (Cupping, and acupuncture) in reducing dysmenorrhea pain.

Keywords : Acupuncture, Cupping, Dysmenorrhea.

INTRODUCTION

Menstruation is a normal and natural event that occurs in women of reproductive age, even though during menstruation they often experience some disturbances and some complaints. A complaint that often occurs is pain during menstruation or commonly known as *dysmenorrhea* (Nurhavivah, 2017). Dysmenorrhea is abdominal pain which is a menstrual disorder that often occurs during menstruation due to cramps in the uterus and menstrual blood flow disturbances. There are 2 types of *dysmenorrhea* seen from the abnormalities in the womb. Primary *dysmenorrhea* occurs when pain is not accompanied by a history of infection, while secondary *dysmenorrhea* occurs when pain is accompanied by infection or inflammation. (Nugroho, Dr. Typhoon, Mph, Main, 2014). Primary dysmenorrhea can cause powerlessness so that it can interfere with daily activities (Ronny Lesmana, Hanna Goenawan, 2017).

According to WHO in 2015, the incidence of *dysmenorrhea* is very large, in every country on average more than 50% of women of reproductive age experience *dysmenorrhea*. In fact,

almost 90% of women of childbearing age experience dysmenorrhea in the United States and around 10-15% experience severe *dysmenorrhea* which results in being unable to carry out their daily activities, so the impact can reduce the quality of life for women (Sari & Hayati, 2020) . According to proverawati (2018) the incidence of dysmenorrhea in Indonesia reaches 55% in women of reproductive age, while according to Sari (2015) the incidence of dysmenorrhea reached 68.7% (Purnama, 2015) .

Pain can occur due to a multiple process including peripheral sensitization, central sensitization, nociception, phenotypic changes and decreased inhibition. A person's experience of pain in the presence of a tissue injury stimulus is connected with four processes, namely transduction which translates the stimulus into the network, transmission which transmits impulses to the dorsal horn of the spinal cord to the brain, then there is an increase in nociceptor activity which is mediated as a process of expanding nerve signals connected to sensation of pain (Latifin, 2021) . Each individual has a different pain intensity, this is influenced by different pain perceptions and pain experiences. Dysmenorrhea pain is caused by excessive production of the hormone prostaglandin, which results in pain and results in increased vasoconstriction of blood vessels. In addition, uterine contractions that occur continuously result in dysmenorrhea (Morgan, 2009) .

Several therapies that can be used for relieve dysmenorrhea pain, namely pharmacological methods by consuming drugs such as ibuprofen, mefenamic acid and other drugs. As for therapy n on pharmacology such as the use of Thibbun Nabawi which can be carried out including cupping therapy, acupressure and acupuncture (Zulia et al., 2018) .

Cupping therapy is a treatment for removing toxins from the body by using special cups to produce suction and adsorption on the skin surface (Kim et al., 2020) . Trauma to the skin due to cupping and nicks will stimulate the secretion of endorphins which will have an anti-pain effect and anxiolytic (anti-anxiety) effects so that the pain of dysmenorrhea can be reduced (Andi & Setyawan, 2022) .

Acupuncture is a medical therapy that originated in China by inserting needles at certain points of yin, yang and qi circulation. It aims to stimulate healing by activating the nervous system, immune system, antidromic axon reflex, releasing opioid peptides and body serotonin. (Woo et al., 2018)

The purpose of writing this literature review is to study more deeply about the effect of using Tib b un Nabawi (cupping therapy and acupuncture on reducing the intensity of dysmenorrhea pain which has similarities with previous studies by reviewing previous studies.

IMPLEMENTATION METHOD

In writing this article the method used is a literature review . Journal search using English and Indonesian through the data base google scholar , pubmed , and science direct. The keywords used in the search included " dysmenorrhea ", "acupuncture" and "cupping " . 62 articles were obtained from Google scholar, 32 articles from Pubmed, and 8 articles from Science direct. After filtering the data, 8 articles were obtained that met the criteria, namely full text, in English and Indonesian and open access. Of the 8 national and international articles that correspond to the topic of the literature review, including 3 national articles and 2 international articles on cupping, 2 international articles and 1 national article on acupuncture in the period 2016 to 2022. The following is a list of selected articles in tabular form.

Table 1. Search results of Literature Review on the Effect of Thibbun Nabawi (Cupping Therapy, Acupressure and Acupuncture) on reducing dysmenorrhea pain intensity

No.	Writer	Year	Title	Results
Cupping				
1.	<u>Wajida Inanmdar</u> <u>Arshiya Sultana Umraz</u> <u>Mubeen</u> , <u>Khaleequr</u> <u>Rahman</u>	2016	<i>Clinical efficacy of Trigonella foenum graecum (Fenugreek) and dry cupping therapy on intensity of pain in patients with primary dysmenorrhea</i>	The results obtained were a reduction in pain in group B which was given cupping therapy (p value > 0.05).
2.	Siti Nur Hasina	2017	<i>The Effects of Cupping Therapy on the level of Dysmenorrhea in Adolescents in RT. 06 Wonoayu Gempol, Pasuruan</i>	The pain level of dysmenorrhea has decreased after cupping therapy. With the results of the Wilcoxon Sign Rank Test, a value of 0.001 is obtained and a value = 0.05.
3.	Maryam Taherpour, et al	2018	<i>The Effects of Dry Cupping on Primary Dysmenorrhea: A Randomized Clinical Trial</i>	After receiving Cupping therapy, it was found that there were significant differences between groups with respect to variations in the severity of dysmenorrhea and systemic symptoms from time to time (P=0.03).
4.	Vania Pangestika Purwaningrum, et al	2019	Cupping Therapy in Reducing the Intensity of Dysmenorrhea and Vital Signs (Pulse and Blood Pressure)	There was a difference in the effectiveness of cupping therapy in the control group for reduce the intensity of dysmenorrhea symptoms. The results showed that the dysmenorrhea intensity variable had (p = 0.000)
5.	Yusro Hadi Maksum, et al	2019	Effects of Cupping on Reducing Dysmenorrhea Pain in College Students	There is a difference in dysmenorrhea pain scale between before (6.78) and after cupping (5.09). Difference in pain 1.69 with a p value of 0.000.

acupuncture				
6.	Rona Riasma Oktobriariani, Ririn Ratnasari	2016	The Effect of Acupuncture on Reducing Menstrual Pain (Dysmenorrhea) in D III Midwifery Student Muhammadiyah University of Ponorogo	There is a significant difference in the distribution of menstrual pain between before and after acupuncture. This is indicated by the probability value of the Wilcoxon test statistic which is less than 0.05 ($p < 0.001$).
7.	Geetha B. Shetty, Balakrishna Shetty, A.	2018	<i>Efficacy of Acupuncture in the Management of Primary Dysmenorrhea: A Randomized Controlled Trial</i>	There was a significant decrease in all variables such as visual analog scale scores for pain, stomach cramps, headaches, dizziness, diarrhea, fainting, mood changes, fatigue, nausea, and vomiting in the study group compared to the control group (p -value = 0 , 05).
8.	Haijun, Wang, Et. al	2019	<i>Effect of an Acupuncture Technique of Penetrating through Zhibian (BL54) to Shuidao (ST28) with Long Needle for Pain Relief in Patients with Primary Dysmenorrhea: A Randomized Controlled Trial</i>	Menstrual pain intensity decreased significantly and was associated with menstrual pain and symptoms improved in patients with primary dysmenorrhea ($p < 0.05$).

RESULTS AND DISCUSSION

After searching and selecting data, 8 articles were found that met the criteria and could be analyzed using various research methods. The research methods are *randomized clinical trials (RCT)*, *pre-experimental*, *quasi-experimental*, crossover clinical trials, and *clinical trial studie*. The research was conducted in different places including Iran, Iraq, Turkey, China and Indonesia.

The first research article conducted by Wajida (2016) was to provide dry cupping therapy using a cup measuring 4.2 cm and one cup measuring 2.5 cm below the umbilicus for 15 minutes in the cupping intervention group. This therapy is carried out on day 1 and day 3 of the menstrual cycle. The results obtained were a decrease in pain in the cupping intervention group compared to the group given fanugreek seeds with a value (p value > 0.05) . Another study was also conducted by Siti (2017) with the cupping technique at the right and left sunnah warik (hip) points. Therapy is carried out for ± 30 minutes. After the Wilcoxon Sign Rank Test was carried out, a value of 0.001 was obtained and a value = 0.05. The results of these measurements showed that there were differences in pain intensity between before and after the intervention.

This is also supported by Taherpour's research (2018), namely by giving dry cupping

therapy in parts lower back on each side of the spine and one in the suprapubic area for 10-15 minutes once a day in the intervention group. Therapy is carried out from 3 days before menstruation to 3 days after menstruation for 3 cycles. From the results of this study, it was found that there was a significant decrease in the average score of dysmenorrhea pain severity and systemic symptoms felt in the intervention group ($P = 0.03$). P value = 0.03 indicates that there is an influence on the intervention given. Similar research on the effectiveness of cupping on reducing dysmenorrhea pain was also carried out by Vania (2019), namely by giving cupping therapy treatment before menstruation or the 14th day after menstruation at the point (al kahlil and al warik on the waist), namely for 5 minutes. This treatment resulted in differences in pain intensity in the intervention group.

This research is also in line with research conducted by Yusro (2019) by providing cupping intervention at the point (Sad) which is carried out in the lower leg between the knee and ankle areas. The intervention was carried out a week before menstruation for 60 minutes in the morning or evening. There was a change in the dysmenorrhea pain scale between before and after the procedure. From the five articles it was concluded that there was an effect of cupping therapy on reducing dysmenorrhoea pain.

The cupping method is a treatment that was passed down by Rasulullah SAW. Cupping therapy can cure various types of diseases, such as gastric disease, ulcers, hearing loss, bone and joint pain, diseases of the female reproductive organs, namely dysmenorrhea and amenorrhoea (Lestari, 2011).

Management of dysmenorrhea with cupping therapy can be done by placing a cupping device at the reproductive point (al kahlil and two al warik points on the waist) for 5 minutes which is given before experiencing menstruation until the 14th day after menstruation (Kurniawati1 et al., 2016) . Other research states that the process of administering cupping therapy begins with selecting the right point, including the right and left sunnah warik (hip) points, the meeting between the gluteus maximus and gluteus medius muscles below the right and left as well as the left lateral side. Cupping therapy is given for ± 30 minutes. After being given therapy, observation is carried out (Hasina, 2017)

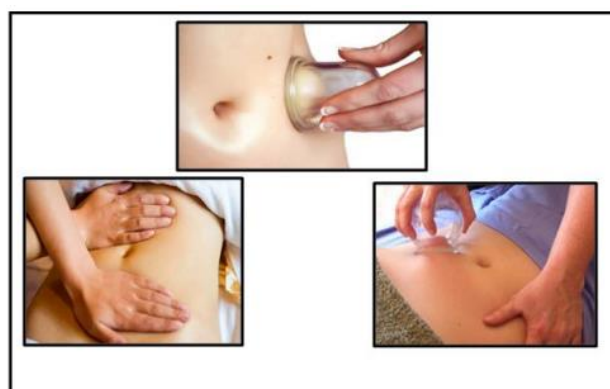


Fig. 1. Images demonstrating the cupping therapy in dysmenorrhoea

Figure 1. Points of sunnah warik

Source : (Nafees & Anjum, 2021)

Cupping at the point of cupping can cause *mast cells* , subcutaneous tissue, fascia and muscles to be damaged. The resulting damage can stimulate the release of serotonin, histamine,

slow reacting substance (SRS) and other substances. This resulted in a reaction in the area where the cupping was carried out and caused relaxation in the muscles (Umar, 2015).

Another therapy that can be used to reduce dysmenorrheal pain is acupuncture. Research conducted by Rona (2016) by stabbing at the Kuan Yen (XIII 4) and Sanyinciau (IV6) points. Therapy is carried out 3 to 5 days before menstruation. The results of this study were that there were significant differences in the distribution of pain in the groups before and after acupuncture therapy. The value of the Wilcoxon test statistic is less than 0.05 ($p < 0.001$). This research is in line with research conducted by Geetha in 2018. There are 12 acupuncture points used in this study, namely: KI-3, SP-8, ST-25, ST-29, ST-30, ST-36, CV -4, CV-6, BL-62, HT-7, LI-4, and PC-6 from 12 acupuncture points, two acupuncture points namely CV-4 and CV-6 were pierced using a single needle for each point, while 10 points other acupuncture punctured bilaterally. The needles were left for 20 minutes without stimulation for each session. Therapy is given 6 days before menstruation and is not given when menstruation occurs. This study showed a significant reduction in all variables such as the visual analogue scale score for pain with a value ($p < 0.05$) of menstrual cramps compared to the control group. Haijun Wang (2019) in China using the acupuncture technique to penetrate Zhibian (BL54) to Shuidao (ST28) with long needles. Treatment begins on the fifth day before menstruation and is carried out for 3 cycles. The needle puncture depth of about 4 to 6 cun is swirled for 1 minute then held at the acupuncture point for 30 minutes. Treatment using the acupuncture technique through Zhibian (BL54) to Shuidao (ST28) is more effective than ibuprofen ($p < 0.05$) in reducing menstrual pain and symptoms in patients with primary dysmenorrhea.

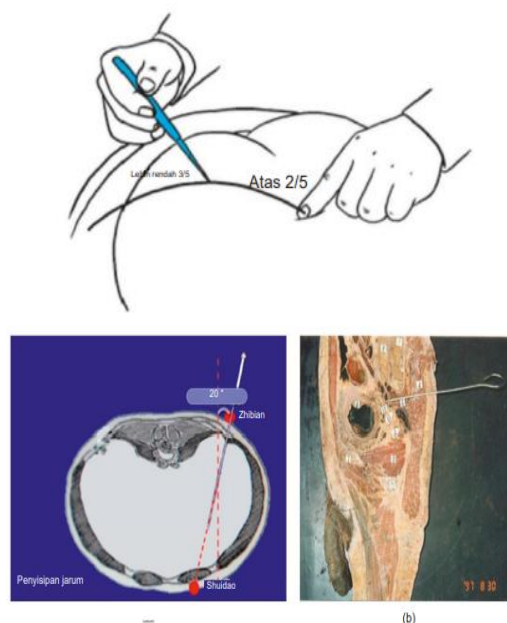


Figure 4. Zhibian point (BL54) penetrates Shuidao (ST28)

Source : (Zhang et al., 2018)

Acupuncture is a medical therapy that originated in China by inserting needles at certain points of yin, yang and qi circulation. This aims to stimulate healing by activating the nervous system, immune system, antidromic axon reflex, releasing opioid peptides and body serotonin (Woo et al., 2018) . Acupuncture therapy is very helpful because it can reduce the pain of

dysmenorrhea. Stimulating acupuncture points can have the effect of releasing β -endorphins and enkephalins, thus releasing pain (Oktobriariani, 2016). The aim of acupuncture therapy is to improve ci and sie circulation so as to stimulate healing by activating the central nervous system, blood circulation system, immunity and normalizing the body's physiological activities.

The acupuncture points that are usually used in the treatment of dysmenorrhea are the Sanyinciau (IV6) and Kuan Yen (XIII4) points. Acupuncture points can stimulate the central and peripheral nervous system in regulating neuroendocrine activity related to hypothalamic pituitary ovary axis receptor expression, and can increase levels of nitric oxide (NO) so that it has a relaxing effect on uterine muscles, inhibits excessive uterine contractions, stimulates nerves in muscles and other tissues so as to support the release of endorphins and other neuro-hormonal factors (Rona Riasma Oktobriariani, 2016) .

Acupuncture is useful for reducing the severity and duration of pain, improving quality of life, reducing time off from school, reducing restrictions on daily activities and reducing side effects of drug administration (Caroline, 2011) . Thus it can be concluded that acupuncture therapy has an effect on reducing dysmenorrhea pain.

Some of the thibbun nabawi treatments that are proven to be safe are cupping, acupuncture, and acupressure. This is supported by previous studies which state that cupping therapy, acupuncture and acupressure are effective in reducing the intensity of dysmenorrhea pain and minimal side effects.

CONCLUSION

1. Cupping therapy can effectively reduce the intensity of dysmenorrhea pain, this therapy can be given by cupping at the *sad point* (part of the lower leg between the knee and ankle) and sunah warik (pelvis). Several studies have shown differences in time intervals and freezing points.
2. Acupuncture therapy is the recommended therapy and is considered as one of the effective treatment modalities for the management of dysmenorrhea.
3. Until now there have been no reported side effects that arise after being given cupping therapy, acupressure, or acupuncture.

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