



## Literature Study: Complementary Therapy in Overcoming Dysmenorrhea

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**Abstract.** Around 50-90% of women in the world experience dysmenorrhea. The prevalence of dysmenorrhea in Indonesia is reported to reach 64.25%, where 54.89%. Complementary therapy is an alternative to overcome dysmenorrhea because it is considered more natural and has minimal side effects. This study aims to review research articles related to complementary therapies that can be used to overcome dysmenorrhea. literature search through academic databases such as Google Scholar, PubMed and ScienceDirect. Literature selection is carried out based on inclusion criteria (scientific articles in the last 5 years, English/Indonesian, relevant topics) and exclusion (irrelevant articles, no abstract/full-text). Interventions such as physical therapy (yoga and stretching), compress therapy, aromatherapy, acupressure, reflexology, and consumption of natural ingredients provide safe and natural solutions to reduce pain intensity. The selection of the appropriate method can be adjusted according to individual preferences, accessibility, and the severity of the pain experienced.

**Keywords:** Dysmenorrhea, Therapy, Complementary.

### 1. BACKGROUND

Dysmenorrhea, or menstrual pain, is a common problem experienced by adolescent girls. The prevalence of dysmenorrhea in the world is reported to be quite high, around 50-90% of adolescent girls experience symptoms of menstrual pain, both primary and secondary. Primary dysmenorrhea, which is not associated with pathological conditions, often occurs in adolescents and is caused by increased production of prostaglandins that trigger excessive uterine contractions. This condition can have an impact on the quality of life of adolescents, such as disruption of daily activities, decreased academic performance, to psychological problems such as anxiety and depression (Durand et al., 2017).

Based on data from the World Health Organization (WHO), around 50-90% of women in the world experience dysmenorrhea, with the majority of cases occurring in adolescents aged 12-24 years (Wulandari and Santoso, 2021). The prevalence of dysmenorrhea in Indonesia is reported to have reached 64.25%, of which 54.89% is primary dysmenorrhea and 9.36% is secondary dysmenorrhea. This condition not only causes physical disorders, such as pain in the lower abdomen, but also has an impact on daily activities, such as decreased concentration in learning, school absenteeism, and emotional disorders (Anggasari and Windarti, 2021).

In overcoming dysmenorrhea, conventional medical therapies such as nonsteroidal analgesics (NSAIDs) and hormonal contraceptives are often used. However, long-term use of these drugs can cause side effects, such as digestive disorders and hormonal imbalances (Harel, 2006). Therefore, complementary therapies are becoming an increasingly popular alternative

because they are considered more natural and have minimal side effects. Several studies have shown the effectiveness of complementary therapies in reducing symptoms of dysmenorrhea. For example, a study by Smith et al. (2016) showed that acupuncture can significantly reduce the intensity of menstrual pain. Another study by Rakhshae (2011) revealed that certain yoga exercises can help relieve pain and improve emotional well-being in adolescent girls.

Studies have shown that complementary therapies provide significant benefits in reducing pain intensity and improving the quality of life of dysmenorrhea sufferers. For example, the use of warm compresses can increase blood flow and relieve muscle tension, while acupressure helps stimulate the release of endorphins which function as natural pain relievers (Astuti, 2019). Likewise, lavender aromatherapy is known to have a relaxing and analgesic effect, while herbal drinks such as turmeric and tamarind have anti-inflammatory properties (Munthe, 2021). Yoga exercises have also been shown to be effective in increasing body flexibility and reducing menstrual pain (Zulkarnain and Fitriana, 2022).

Aromatherapy has also been reported to have a positive effect on dysmenorrhea. Kim et al. (2011) in their meta-analysis found that the use of essential oils, such as lavender and peppermint, can reduce menstrual pain through smooth muscle relaxation mechanisms (Nasution, 2020). In addition, the use of herbs such as ginger and chamomile has also been shown to have anti-inflammatory and antispasmodic properties that are effective in reducing menstrual pain (Srivastava et al., 2010). However, although many studies have been conducted, further studies are needed to combine the results of these studies and provide more comprehensive guidelines.

Based on this background, it is important to conduct a literature study to identify and analyze various complementary therapies used to treat dysmenorrhea in adolescents, and to evaluate their effectiveness and mechanisms of action.

## **2. THEORETICAL STUDY**

Complementary Therapy is a form of alternative medicine that complements conventional medicine. This approach integrates nursing techniques such as touch and massage to improve the patient's quality of life and reduce symptoms. This definition is in accordance with the Regulation of the Minister of Health on complementary traditional-alternative medicine (Ministry of Health of the Republic of Indonesia, 2015).

Dysmenorrhea is a painful menstrual condition characterized by uterine muscle spasms, causing abdominal pain, cramps, back pain, and disruption of daily activities (Price, 2016; Rosyida, 2017). This condition is common in adolescents and young women, lasts for 2-3 days,

and can cause physical disorders such as nausea, weakness, and diarrhea (Lestari, 2015; Pundati, 2015). Dysmenorrhea is the most common complaint that causes young women to go to the doctor for consultation and treatment (Rizki & Ratna, 2016).

Dysmenorrhea treatment can be done through two approaches: pharmacological and non-pharmacological therapy. Pharmacological therapy uses analgesic drugs such as aspirin, mefenamic acid, paracetamol, and feminax to relieve pain. Meanwhile, non-pharmacological therapy involves techniques such as warm compresses, dysmenorrhea exercises, relaxation, listening to verses of the Qur'an, acupuncture, aromatherapy, and the use of traditional medicines such as ginger and turmeric (Wagiyo, 2018).

### **3. RESEARCH METHODS**

This study uses a literature study method to analyze the effectiveness of complementary therapies in treating dysmenorrhea. The study began with identifying the problem and creating research questions. Then, a literature search was conducted through academic databases such as Google Scholar, PubMed and ScienceDirect. Literature selection was carried out based on inclusion criteria (scientific articles in the last 5 years, English/Indonesian, relevant topics) and exclusion (irrelevant articles, no abstract/full-text).

Data were analyzed using content analysis and descriptive statistics methods. The validity of the data was checked through validity and reliability. Research ethics are guaranteed by respecting copyright, avoiding plagiarism and presenting results objectively. The results of the study are expected to contribute to the development of dysmenorrhea treatment with complementary therapies.

### **4. RESULTS AND DISCUSSION**

The results of a review of 10 articles on complementary therapies in treating dysmenorrhea in adolescents can be seen in Table 1.

**Table 1. Research Articles on Complementary Therapy in Treating Dysmenorrhea**

No.	Researcher Name	Title Research and Years	Research methods	Research result
1	Munthe, CA, et al.	Implementation Therapy Warm Water Compress On Dysmenorrhea Pain In Adolescents (2021)	Quasi- experiment with pre-test and post-test	Warm water compress effective in reduce intensity painful dysmenorrhea in adolescents .
2	Astuti, Y., et al.	Influence Therapy Murottal and Aromatherapy To Intensity Dysmenorrhea (2019)	Experiment with two groups (control and intervention)	Combination therapy murottal and lavender aromatherapy are significant lower intensity painful menstruation .
3	Anggasari , Y., Windarti	Acupressure Effectiveness and Yoga Exercises to Reduce Menstrual Pain (2021)	Literature review	Acupressure and yoga exercises have been proven effective reduce painful period through release endorphins .
4	Wulandari, R., Santoso	Lavender Aromatherapy as Approach Non-pharmacological For Relieving Dysmenorrhea Pain (2021)	Experiment clinical	Lavender aromatherapy in significant reduce painful dysmenorrhea and provide effect relaxation .
5	Nasution, Z., et al.	Effectiveness Acupressure and Compress Warm For Reduce Dysmenorrhea Pain (2020)	Quasi- experiment with group control	Combination acupressure and compress warm show decline intensity painful significant menstruation .
6	Zulkarnain, I., Fitriana	Effectiveness of Yoga Exercises on Menstrual Pain in Adolescent Girls (2022)	Experiment with pre-test and post-test	Regular yoga practice is effective in increase flexibility body and reduce painful menstruation .
7	Rahmawati, D., et al.	Influence Massage Reflection on Dysmenorrhea Pain in Female Students (2020)	Experiment with group intervention and control	Massage reflection capable lower intensity painful period in a way significant .
8	Afrioza and Sari	Influence Drink Turmeric Tamarind for Overcoming Menstrual Pain in Adolescents in Sukasari Village (2022)	Pretest and posttest experiments design	Giving turmeric and tamarind intervention can be an alternative in reducing the scale of menstrual pain in adolescents. Turmeric and tamarind drink intervention can affect the reduction of menstrual pain in adolescents
9	Handayani , et al.	Effectiveness of Abdominal Stretching Exercise in Reducing Dysmenorrhea in Adolescent Girls at Panca Bhakti High School, Pontianak (2022)	Quantitative research with a quasi-experimental design using a one-group pretest-posttest approach	There is an effect of abdominal stretching on reducing adolescent dysmenorrhea

No.	Researcher Name	Title Research and Years	Research methods	Research result
10	Fauziyah and Ade	Review: Effective plants to treat dysmenorrhea (2019)	Systematic literature review	The review results show that The best herbs to relieve dysmenorrhea symptoms are fennel seeds, hop leaves, chamomile flowers, lavender flowers, lemon balm leaves, mint leaves, rose flowers, papaya leaves, lemongrass leaves and zataria flowers.

Study about Handling dysmenorrhea show progress significant in reduce intensity pain. Ten research conducted between 2019-2022 found that therapy complementary and pharmacology alternative effective reduce painful.

Dysmenorrhea pain is problem common experienced by many women, especially at the age of teenagers. Various study has done for find effective method in overcome condition this, good through approach pharmacological and also nonpharmacological. One of the frequent interventions used is therapy warm water compress, which is proven effective in reduce intensity pain. Research by Munthe, CA, et al. (2021) shows that method this can increase flow blood and give effect relaxation of the muscles in the pelvic area.

In addition, the combination therapy murottal and lavender aromatherapy also show significant results in relieve painful menstruation. According to Astuti, Y., et al. (2019), the combination this no only reduce pain but also provide effect calm through subtraction stress. Approach similar use lavender aromatherapy single, as studied by Wulandari, R., and Santoso (2021), is also effective give relaxation and reduce intensity painful.

In terms of activity physical, yoga exercises and abdominal stretching become an interesting choice. Zulkarnain, I., and Fitriana (2022) found that yoga can increase flexibility body at a time reduce painful menstruation. Similarly, Handayani, et al. (2022) reported that stretching stomach in a way significant help lower painful dysmenorrhea in adolescents.

Approach that does not lost effective is frequent acupressure combined with other methods such as compress warm. Nasution, Z., et al. (2020) found that combination this give more optimal results compared to use of one of the method only. Acupressure Work through stimulation dot, dot, dot certain stimulating release endorphins For relieve painful .

On the other hand, consumption material natural also becomes an interesting choice. Afrioza and Sari (2022) show that drink turmeric sour effective in lower intensity painful through characteristic anti-inflammatory and analgesic. Research others, such as that done by

Fauziyah and Ade (2019), recommend herbal plants such as seed fennel, lavender flowers, and lemon balm leaves as solution non-pharmacological for relieve symptom dysmenorrhea.

Lastly, massage reflection also provides significant contribution. Research by Rahmawati, D., et al. (2020) shows that technique this capable lower painful period with stimulate dot, dot, dot related reflections with system reproduction.

In general overall, various methods reviewed show that intervention non-pharmacological like therapy physical, aromatherapy, and the use of herbal ingredients can become solution effective and safe For overcome painful dysmenorrhea. Approach This give a promising alternative for women who want avoid consumption drugs chemistry or look for more methods natural and comfortable.

## 5. CONCLUSION AND SUGGESTIONS

Various non-pharmacological methods have been proven effective in managing dysmenorrhea pain. Interventions such as physical therapy (yoga and stretching), compress therapy, aromatherapy, acupressure, reflexology, and consumption of natural ingredients provide safe and natural solutions to reduce pain intensity. The selection of appropriate methods can be adjusted to individual preferences, accessibility, and the severity of pain experienced. With increasing understanding of these approaches, women have more options to manage dysmenorrhea effectively without relying on chemical drugs.

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