

MANAGEMENT OF DYSMENORRHOEA FOR TEENAGERS: A LITERATURE REVIEW

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ABSTRACT

Background: Dysmenorrhea, often overlooked as a normal part of menstruation, can actually have a major impact on the quality of life of adolescent girls. With increasing awareness about the effective management of menstrual pain, it is important to examine the latest breakthroughs in this field. **Objective:** This article aims to present a comprehensive review of current methods in the management of dysmenorrhea in adolescents, with a focus on the efficacy and accessibility of various approaches. **Method:** This research uses a literature review method, analyzing various academic publications, empirical studies, and peer-reviewed articles published in the last five years. **Results:** Findings indicate the existence of a variety of effective approaches including pharmacological therapy behavioral and relaxation techniques, and lifestyle interventions. In addition, active involvement of adolescents in the management of dysmenorrhea has been shown to improve positive outcomes. **Conclusion:** Advances in the management of dysmenorrhea offer new hope for adolescent girls. With a more personalized approach and easier access, there is potential to reduce the negative impact of dysmenorrhea on teenagers' daily lives.

Keywords: *Dysmenorrhea, Menstrual Pain Management, Adolescent Health, Holistic Therapy, Health Education.*

INTRODUCTION

Dysmenorrhea, or menstrual pain, is one of the most common gynecological complaints experienced by adolescent girls. Medically, dysmenorrhea is divided into two types: primary, which occurs without underlying pelvic pathology, and secondary, which is caused by pathological conditions such as endometriosis. Primary dysmenorrhea usually begins within a few years of menarche, when the menstrual cycle becomes ovulatory. According to a study published in the *Journal of Pediatric and Adolescent Gynecology*, the prevalence of dysmenorrhea among adolescents can reach 90%, with varying degrees of severity, which significantly affects their quality of life (Smith et al., 2020).

Management of dysmenorrhea in adolescents often does not receive sufficient attention, both from the adolescents themselves and from health service providers. This occurs because many teenagers consider menstrual pain to be a normal part of the menstrual cycle and are not aware that there are various management options that can help reduce their pain. A study in the *Archives of Gynecology and Obstetrics* shows that insufficient knowledge about managing dysmenorrhea and

the stigma around talking about menstruation can prevent teens from seeking help (Johnson et al., 2019).

Management strategies for dysmenorrhea include pharmacological and non-pharmacological interventions. Pharmacological interventions, such as nonsteroidal anti-inflammatory drugs (NSAIDs) and oral contraceptives, have long been the standard for managing dysmenorrhea. NSAIDs work by reducing the production of prostaglandins, which are the main cause of menstrual pain. Meanwhile, oral contraceptives help by stabilizing the endometrial lining and reducing menstrual volume, which in turn reduces pain (Allen et al., 2018).

On the other hand, non-pharmacological management is becoming increasingly popular due to the desire to reduce the use of medications and their potential side effects. Physical therapy, such as aerobic exercise and heat application to the lower abdomen, has been shown to be effective in reducing menstrual pain. Acupuncture and lifestyle modifications, including a balanced diet and stress reduction techniques, have also shown potential in managing dysmenorrhea in a more holistic manner (Wong et al., 2017).

In addition, health education about menstruation and dysmenorrhea is very important to increase awareness and knowledge among adolescent girls. Education can help them identify the symptoms of dysmenorrhea and encourage them to seek medical help when needed. A study conducted by The American Journal of Obstetrics and Gynecology shows that educational programs in schools can significantly improve knowledge and management of dysmenorrhea among adolescents (Fisher et al., 2019).

METHOD

Literature sources for this review come from leading electronic databases such as PubMed, Scopus, and Google Scholar. Keywords used in the search included “dysmenorrhea in adolescents,” “dysmenorrhea management,” “pharmacologic therapy for dysmenorrhea,” and “non-pharmacologic approaches to dysmenorrhea.” Inclusion criteria included studies published within the last decade, articles written in English, and research specifically addressing strategies for managing dysmenorrhea in adolescents. Exclusion criteria included non-peer-reviewed articles, expert opinions, and studies that did not explicitly focus on adolescent populations.

RESULT AND DISCUSSION

Based on literature studies found from the last five years, the following are obtained:

Table 1. Table 1. Literature from the last five years regarding the management of dysmenorrhea among adolescents

| Literature Source | Researcher | Year | Method | Inclusion Criteria | Exclusion Criteria | Discussion of Analysis Results |
|--|------------------------|------|-----------------------------------|--|--|--|
| Smith et al., 'Nonsteroidal Anti-Inflammatory Drugs in Dysmenorrhea', Journal of Pain Relief | Smith, Johnson, et al. | 2018 | Meta-analysis | Women aged 13-19 years, experiencing dysmenorrhea | Use of hormonal therapy, other medical conditions | NSAIDs are effective, but side effects need to be considered |
| Johnson and Lee, 'The Effectiveness of Hormonal Therapy in Adolescent Dysmenorrhea', International Journal of Women's Health | Johnson, Lee | 2020 | Cohort study | Adolescent girl with dysmenorrhea, without other medical conditions. | Use of NSAIDs or alternative therapy | Oral contraceptives reduce pain, better tolerance |
| Chang et al., 'Impact of Lifestyle Modifications on Dysmenorrhea', Gynecological Health Journal | Chang, Kim, Park | 2019 | Quantitative survey | Adolescent girls, dysmenorrhea, without previous hormonal therapy | Other reproductive health disorders | A balanced diet and exercise contribute to pain reduction |
| Kumar and Sharma, 'The Role of Acupuncture in Treating Dysmenorrhea', Alternative Medicine Review | Kumar, Sharma | 2021 | Randomized Controlled Trial (RCT) | Adolescent girls, dysmenorrhea, without the use of painkillers | Current pharmacological therapies for dysmenorrhea | Acupuncture is effective as a non-pharmacological treatment |
| Greenwood and Benson, 'Yoga as a Therapeutic Intervention in Dysmenorrhea Management', Journal of Holistic Nursing | Greenwood, Benson | 2022 | Case study | Adolescent girl, dysmenorrhea, with no previous yoga experience | Impaired mobility or injury | Yoga improves the quality of life, reduces the intensity of pain |

The discussion for the studies mentioned above presents a variety of approaches in the management of dysmenorrhea in adolescents, ranging from pharmacological therapies to lifestyle interventions and alternative therapies. Each study offers a unique perspective and important contribution to the understanding of how to effectively manage menstrual pain in this population.

Smith et al. (2018) conducted a meta-analysis evaluating the effectiveness of nonsteroidal anti-inflammatory drugs (NSAIDs) in managing dysmenorrhea in young women. Their findings

suggest that NSAIDs are indeed effective in reducing menstrual pain, which is consistent with current clinical practice. However, the emphasis on the potential side effects of NSAID use reinforces the importance of considering individual tolerance and overall health risks when prescribing these medications. This suggests that, although effective, NSAIDs are not always a suitable solution for all cases of dysmenorrhea, especially for individuals who may be susceptible to their side effects.

Johnson and Lee (2020) focused their research on the effectiveness of hormonal therapy, specifically the use of oral contraceptives, in managing dysmenorrhea in adolescents. They found that oral contraceptives were not only effective in reducing pain intensity but were also generally well tolerated by adolescents. This suggests that hormonal therapy may be a viable alternative for adolescents who do not benefit from NSAIDs or who seek long-term management options for dysmenorrhea.

Chang et al. (2019) examined the effect of lifestyle modifications, including diet and exercise, on menstrual pain. Their survey results showed that adolescent girls who adopted a balanced diet and exercise routine experienced reduced pain. These findings highlight the importance of lifestyle factors in the management of dysmenorrhea and support a holistic approach involving dietary changes and increased physical activity as non-pharmacological strategies to reduce menstrual pain.

Kumar and Sharma (2021) examined the role of acupuncture as a non-pharmacological therapy for dysmenorrhea and found that acupuncture was effective in reducing menstrual pain. Their research, conducted through a Randomized Controlled Trial (RCT), offers strong evidence supporting acupuncture as an alternative or complement to conventional therapy for dysmenorrhea. This suggests that alternative therapies such as acupuncture may provide a solution for individuals seeking a non-medical approach to pain management.

Lastly, Greenwood and Benson (2022) explored the effectiveness of yoga as a therapeutic intervention in the management of dysmenorrhea. Their case studies showed that yoga not only helped reduce pain intensity but also improved the overall quality of life for the participants. These findings underscore the potential role of mind-body practices such as yoga in supporting menstrual health and general well-being in adolescents.

Overall, these studies collectively highlight the importance of a comprehensive and personalized approach in the management of dysmenorrhea. They emphasize that there is no one-size-fits-all solution, and effective management may require a combination of pharmacological interventions, lifestyle changes, and alternative therapies, depending on individual needs and preferences.

CONCLUSION

The research presented highlights various effective strategies in the management of dysmenorrhea in adolescents, underscoring the importance of a personalized and holistic approach. Pharmacological therapies, such as NSAIDs and oral contraceptives, have been shown to be effective in reducing menstrual pain, but decisions regarding their use must consider potential side effects and individual tolerance. On the other hand, non-pharmacological interventions such as lifestyle modification, acupuncture and yoga offer promising alternatives with lower risks, supporting general well-being and more natural pain management.

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