



Effect Of Yoga In Dysmenorrhea

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Introduction- Dysmenorrhea is classically defined as cyclic menstruation pain, which goes with cramps, and may be accompanied by lower back pain, nausea and vomiting, headaches or diarrhoea. A diagnosis of primary dysmenorrhea is usually made with the exclusion of possible causes, as there is no identifiable underlying pathology. Secondary dysmenorrhea is a complication of pathologies such as endometriosis, leiomyomas, PID, adenomyosis, endometrial polyps and menstrual outflow obstruction^[1]. According to previous studies, from among the complementary and alternative therapies available, yoga seems to suppress menstrual pain by reducing the level of prostaglandin production and myometrial ischemia via the “down-regulation of the hypothalamic–pituitary–adrenal axis and the sympathetic nervous system”.

Yoga is known to play an important role in reducing stress and sympathetic activity, increasing parasympathetic activity, improving one’s quality of life, and also by decreasing psychological symptom levels^[1]. It also has beneficial effects on physical and mental health problems through downregulation of the hypothalamic– pituitary–adrenal axis and the sympathetic nervous system, which may also be useful for managing primary dysmenorrhea by reducing menstrual pain^[2]. *Yoga* helps in increasing the flow of vital energy to the reproductive organs and establishes a balance among hormones regulating menstruation. Exercising affects the levels of steroid hormones in blood circulation of women in reproductive ages^[3, 4]. Any form of exercise is known to release endorphins which are produced by the brain that raises the pain threshold [5]. Postures help to stimulate the nervous system from with sensory input from all over the body. The *Asana* used in this study help in the following ways:

Bhujangasana: This *Asana* is known to tone the female reproductive system- the uterus and the ovaries there by alleviating menstrual pain and reducing stress. It also helps by stretching the abdominal muscles.

Matsyasana: It helps in improving flexibility of the spine and also stimulates the abdomen increasing blood supply to the pelvic organs.

Vajrasana: This *Asana* helps in relaxation of pelvic floor muscles which reduces the stimuli passing through the spasmodic muscles leading to pain relief [6].

Dhanurasana: It stimulates the uterus and also increases the blood flow and relieves back pain during menstruation. It also stretches the muscles of the posterior aspect of trunk, ankles, and groin.

Apanasana: Forward flexing to compress the abdomen helps in stimulating the enteric nervous system. *Shavasana* includes lying down and relaxing. When one is relaxed the sympathetic effect on various organs is diminished, the muscle tone in smooth muscles is reduced which allows vessels to dilate, increasing the blood supply [7].

Yogic Management of menstrual disorders- *Sirshasana* and *Sarvangasana* are not advised during menstruation. *Vajrasana*, *Shashankasana*, *Marjari-Asana*, *Vyaghrasana* and abdominal breathing in *Shavasana* help to relieve cramp. Congestive period pain is relieved when the menstrual flow is at its peak and this flow in orgasm. This suggests that *Moola* bandha could be particularly beneficial, although you must discontinue this practice at the very first suggestion of faintness or other unpleasant effects.

The following program should be followed throughout the monthly cycle. Unless there is profuse bleeding or debilitating pain, the practice can even be done during the menstrual cycle.

1. *Surya Namaskar*- This will increase the pranic energy and balance nervous and endocrine functions. According to capacity, gradually build up to twelve rounds over a period of weeks or months.
2. *Asana*- The *Shakti Bandha* series is most effective in releasing blockages of energy in the pelvic region. Then *Sidha Yoni Asana*, *Ushtrasana*, *Marjari-Asana*, *Vyaghrasana*, *Shashnkasana*, *Bhujangasana*, *Shalabhasana*, *Chakrasana*, *Grivasana*, *Matsyasana*, *Ardh Matsyendrasana*, *Uttasana*, *Pada Hastasana*, *Sirshasana*, *Tadasana*. Inverted *Asanas* are particularly recommended as they promote drainage of the reproductive organs and enhance pituitary blood flow.
3. *Pranayam*- *Nadi shodhana*, *Ujjayi*, and *Bharamari* are effective, especially in cases of headache, migraine and mental tension in general. *Pranayam* removes psychic, prolapse, *Nadi Shodhana* stage 3, with *Moola* and *Jalandhar Bandhas* proves most effective. *Bhastrika* enhances vitality and eliminates toxins and is recommended in cases of dysmenorrhea.

Research papers on effect of Yoga in Dysmenorrhea-

Shraddha Prabhu et al in his research paper topic "**EFFECT OF YOGASANAS ON MENSTRUAL CRAMPS IN YOUNG ADULT FEMALES WITH PRIMARY DYSMENORRHEA**" Dysmenorrhea-one of the most common gynaecological complaints among young adult females. The effect of various *Yogasanas* has proven to reduce the pain caused during menstruation as a result of hormonal changes. In spite of the various methods, most women usually prefer to take analgesics as a primary treatment and do not seek other forms of medical help. This study aims to underscore the importance of performing *Yogasanas* and to highlight its importance as a non-pharmacological form of treatment. Method: This study was an experimental study which included a total of 80 subjects. Age group was between 18- 22 years (mean age 20.3 ± 2.1). They were divided into 2 groups - experimental and control group .The experimental group were made to perform *Yogasanas* while the control group was made to perform core exercises for 4 sessions in a week of which 2 were supervised sessions. Subjects were recruited using the Verbal Multidimensional Scoring System for Dysmenorrhea (VMSS) and they were assessed using Moo's Menstrual Distress Questionnaire and Perceived Stress Scale. Statistical analysis was done of the Pre and Post data. Result: There was a significant difference within the groups (Experimental and Control) in regards to all the 3 outcome measures ($P < 0.05$). Between the groups, there was a significant difference ($P < 0.05$) in the VMSS and Moo's MDQ questionnaire while there was no significant change in the PSS score ($P 0.641$). Conclusion: Both, *Yogasanas* and core exercises can be used in reducing menstrual pain. These are cost effective and can be done as a home exercise to aid in menstrual well-being and to help improve one's quality of life. [8]

(EFFECT OF YOGASANAS ON MENSTRUAL CRAMPS IN YOUNG ADULT FEMALES WITH PRIMARY DYSMENORRHEA Shraddha Prabhu, Sanket Nagrale *, Ashok Shyam, Parag Sancheti., International Journal of Physiotherapy and Research, Int J Physiother Res 2019, Vol 7(4):3129-34. ISSN 2321-1822 DOI: <https://dx.doi.org/10.16965/ijpr.2019.140>)

CONCLUSION- *Yogasanas* and core strengthening both can be safely used for reducing symptoms related to primary dysmenorrhea. It is cost effective and therefore it can be used as a home based treatment and can also be implemented among college students in order to augment their menstrual well-being and also their over-all well-being as it will also aid in improving physical fitness. Regular exercises are recommended as it will help reduce absenteeism from work and improve quality of life. It will also help individuals to participate in various activities during menstruation.

References-

1. (2016) Williams Gynecology. (3rd edn) McGraw-Hill Education.

[1]. Yang NY, Kim SD. Effects of a yoga program on menstrual cramps and menstrual distress in undergraduate students with primary dysmenorrhea: a single-blind, randomized controlled trial. *The Journal of Alternative and Complementary Medicine*. 2016 Sep 1; 22(9):732-8.

[2]. Kanojia S, Sharma VK, Gandhi A, et al. Effect of yoga on autonomic functions and psychological status during both phases of menstrual cycle in young healthy females. *Journal of Clinical and Diagnostic Research*. 2013;7:2133–2139.

[3]. Warren MP, Perlroth NE. Hormones and sport: the effects of intense exercise on the female reproductive system. *Journal of Endocrinology*. 2001;170:3– 11.

[4]. Jahromi M, Gaeini A, Rahimi Z. Influence of a physical fitness course on menstrual cycle characteristics. *Gynecological Endocrinology*. 2008;24:659–62.

[5]. Abbaspour Z, Rostami M, Najjar Sh. The effect of exercise on primary dysmenorrhea. *J Res Health Sci*. 2006;6:26–31.

[6]. S Dutta Ray, psychosomatic adaptation and yoga, yogic exercises physiologic and psychic process, chapter no.4, first edition, 1998:33-35.

[7]. Gauri S. Kulkarni, Nilima Bedekar, An Experimental Study of Selected Yoga Poses on Young Adult Female Population Reporting Primary Dysmenorrhoea. *VIMSHSJ*,(2014),1(3)Light Natasha, Palmer Nikki, Utrup Chris, the effects of core strengthening on Dysmenorrhea, 2006 Oct.

[8] EFFECT OF YOGASANAS ON MENSTRUAL CRAMPS IN YOUNG ADULT FEMALES WITH PRIMARY DYSMENORRHEA Shraddha Prabhu, Sanket Nagrale *, Ashok Shyam, Parag Sancheti., International Journal of Physiotherapy and Research, Int J Physiother Res 2019, Vol 7(4):3129-34. ISSN 2321-1822 DOI: <https://dx.doi.org/10.16965/ijpr.2019.140>)