

**IMPACT OF YOGASANA BETWEEN MENARCHE TO MENOPAUSE (M2M): A  
REVIEW****Rakesh Mishra\*, Ankita Mishra\*\*, Mukesh Tiwary\*\* and I. B. Kotturshetti\*\*\***

\*PG Scholar, Department of PG Studies in Panchakarma, Rajiv Gandhi Education Society's Ayurvedic Medical College Hospital & PG Research Centre, Ron.

\*\*\*Associate Professor, Bharti Ayurved College and Hospital, Durg.

\*\*Assistant Professor, Bharti Ayurved College and Hospital, Durg.

\*\*\*Principal, CMO and Sr Professor, Rajiv Gandhi Education Society's Ayurvedic Medical College Hospital & PG Research Centre, Ron.

\*Corresponding Author: Rakesh Mishra

PG Scholar, Department of PG Studies in Panchakarma, Rajiv Gandhi Education Society's Ayurvedic Medical College Hospital & PG Research Centre, Ron.

Article Received on 23/08/2021

Article Revised on 13/09/2021

Article Accepted on 03/10/2021

**ABSTRACT**

Menarche and menopause are two important milestones of an every women's life. Menarche is the first menstrual period and menopause is the period when complete menstrual cycle is ceases. These milestones are universal and show a mark of the beginning and end of a woman's reproductive phase. From the menarche to menopause, a woman's body undergoes a lot of physical, physiological and Psychological transformations. This physical and mental health can be restored through noninvasive method i.e. *Yoga*. *Yoga* plays the role of a healer for a new set of physical and mental changes in women. Most commonly performed *Yoga* practices are *Asana* (postures), *Pranayama* (controlled breathing) and *Dhyana* (meditation). Thus *Yoga* has been utilized as a therapeutic tool in order to achieve positive health and control, cure diseases. The exact mechanism as to how *Yoga* helps in various disease states is not known. There may be neuro-hormonal pathways with a selective effect in each pathological situation. Integrated approach of *Yoga* is effective in managing the healthy menstruation and menopausal symptoms and overall health of women.

**KEYWORD:** Health, Menstruation, Menarche, Menopause, *Yoga*.

**INTRODUCTION**

Since from last few years, *Yoga* appears to be everywhere, good for everything and suitable for everyone – *Yoga* is an ancient *Indian* art designed to bring balance and health to the physical, mental, emotional and spiritual spheres of an individual.<sup>[1]</sup> Most commonly *Yoga* is misunderstood as a form of physical exercise. But there is a vast difference between *Yoga* and other physical exercises. *Yogasana* are psycho-physiological, whereas physical exercises are purely external. *Yoga* is a culture of the body, mind, and soul, and is practiced with a deeper awareness, bringing equipoise of body and mind. But, Physical exercise is mainly emphasized for body movements.

History of *Yoga* goes way beyond 2500 years. The word "Yoga" comes from a Sanskrit word "yuj" which means union, or yoke, to join, and to direct and concentrate one's attention.<sup>[2,3]</sup> Maharishi Patanjali, the founder of *Yoga*, described the practice of *Yoga* of Ashtanga (eightlimbs) as a practical way to evolve the mind, body and soul, they are Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana, Samadhi, but the most commonly performed *yoga* practices are Asana

(postures), Pranayama (controlled breathing) and Dhyana (meditation).<sup>[4]</sup> The main goal of *yoga* is to calm the mind, to provide better co-ordination of mind and body so that healthy life can be achieved with spiritual growth.

*Pranayama* is a *Sanskrit* word meaning "restraint of the *Prana* or breath", commonly known as breath control. Practice of *Pranayama* develops a steady mind, strong willpower and sound judgment. It strengthens the lungs, improves their function and enhances the lung power. It improves the defense mechanism of the body, slows down mental chatter and infuses positive thinking.

*Dhyana* (Meditation) is a process whereby consciousness looks in and acts upon itself. The aim of *Dhyana* is to help mind and to practice some form of contemplation or introspection.<sup>[5]</sup>

A woman who is trying to live a successful life as per the expectations and norms of the society today is continually challenged with rapidly accumulating stresses. It is necessary for her to keep perfect health and harmony in order to withstand the stress and strains of life. The menstrual cycle is a key indicator of overall

health for women of reproductive age. *Yoga* provides great help at puberty when the body is changing to womanhood. *Yogasana* and *Pranayama* as part of her way of life, they will be even more meaningful and advantageous to her.

Therefore *Yoga* has been utilized as a therapeutic tool in order to achieve a total positive health and as curative measure for various diseases. The exact mechanism as to how *Yoga* helps in various disease conditions is not known. It has been suggested that there could be neuro-hormonal pathways with a selective effect in each pathological situation. It is possible that *Yogasana* bring about normalization of the pathological state by control of counter-regulatory hormones or by increased receptor sites. It has also been suggested that *Yogic* practices create a hypothermic state and an alteration in the sympathetic-parasympathetic axis.<sup>[6]</sup> Thus *Yoga* has a great potency to yield physical and mental health, which is essential for women.

### MENSTRUATION PHASE

Adolescence is the transition period of growth from childhood to maturity. The first stage of womanhood is menarche. Menarche is the first menstrual period. During this period physical and mental changes occur.

#### A) *Yogasana* during menstruation.<sup>[8]</sup>

<i>Yogasana</i>	Benefits
Utthita Trikonasana (Triangle pose)	<ul style="list-style-type: none"> <li>Helps to relieve low back pain</li> <li>Reduce cramping, excessive bleeding, and bloating</li> </ul>
Uttanasana (Standing forward bend)	<ul style="list-style-type: none"> <li>Helps to reduce swelling and stiffness in the joints.</li> <li>Provide relief from low back pain, menstrual cramps, and migraine headaches.</li> </ul>
Janu Sirsasana with Legs apart(Head to Knee pose)	<ul style="list-style-type: none"> <li>Reduce heavy bleeding</li> </ul>
Suptavirasana (Reclining Hero pose)	<ul style="list-style-type: none"> <li>Reduce pelvic soreness and abdominal cramps.</li> <li>It helps to counteract fatigue</li> </ul>

#### B) *Pranayama*

*Pranayama* is very useful during menstruation as it helps to balance the emotions and calm the mind. It can also help one to deal with any pain. Deep breathing is very beneficial, especially when practiced in

- *Tadagasana* (Pond Pose) or *Shavasana* (Corpse Pose).
- *Viloma Pranayama* I and II
- *Bhramari* (Humming Bee Breath),
- *Anulomviloma* (Alternate Nostril Breathing),
- *Ujjayi* (Victorious Breath),
- *Sheetali* (Cooling breath through the tongue) and
- *Shitkari* (Cooling breath through the teeth).

#### C) *Dhyana*

Meditation is another most beneficial practice at this time particularly. Chanting 'Ohmkar' and meditation on 'Ohm' can be used. *Antarmouna*, the practice of inner silence is a technique where one observes ones thoughts. Chanting of *Mahamrityunjaya mantra* will

Menstruation is defined as visible manifestation of cyclic physiologic uterine bleeding due to shedding of the endometrium, following invisible interplay of hormones mainly through Hypothalamo-pituitary-ovarian axis.<sup>[7]</sup> It starts at about 12 years and ends between 45 and 55 years. Menstruation is a time of cleansing and reflection for the woman. It is a purely physiological process preparing the female body for reproduction, a biological function. The menstrual cycle is very delicate. In regard with menstrual cycle all women are different and there are no set of rules to practice during menstruation but there are some general guidelines that can adopted. During this period listening to one's own body is important.

#### YOGA DURING MENSTRUAL CYCLE

During the cycle initially 2-3days (48 to 72 hours) a complete rest is advised, at this time *Yoga* practice is done to align body with the frequency of the earth, to gather energy, and to rest. This is the most sensitive part of the cycle, But to a certain point, normal practice of *Asana* and *Pranayama* can be done and there are certain practices that should be avoided.

give benefits as will simple meditation on the breath or *ajapajapa*. *Yoga nidra* is also highly recommended at this time.

#### *Yogasana* to be avoided during menstrual phase<sup>[9]</sup>

1. Inversion *asana*: Such as *Sirasana*, *Halasana*, etc are avoided throughout the menstruation. Because inversion *Yogasana* disturbs *Apana Vayu*, *Apana Vayu* one among *Panchavayu* which normally flows in the downward direction from the *Manipur chakra* (naval centre) to *Mooladhar chakra* (cervix), is reversed. This is helpful to awaken the *Kundalini* but during menstruation it goes against the natural flow. At this time it disturbs the menstrual cycle causing reproductive issues. Another view, during inversions the uterus is pulled towards the head and causes the broad ligaments to be over stretched causing partial collapse of the veins, leaving open arteries to continue pumping blood. This can lead to vascular congestion and increased menstrual bleeding.

2. Very strong *vinyasa* such as *Urdhva Prasarita Padasana*, *Ustrasana*, *Dhanurasana*, *Dvipada Viparita Dandasana* etc. strong backbends, twists, arm balances and standing positions that put a lot of stress on the abdominal and pelvic region are to be avoided. At these positions there is a need more physical strength and exertion that is lacking during this period.
3. Deep *pranayama*: *Bhastrika* (Bellow's Breath), *Surya Bhedan* (Right Nostril Breathing) and *Kapalbhati* (Frontal Brain Cleansing), fast breathing, strain with the breath, and practice of *Kumbhaka* is avoided as these will increase the heat and redirect the *Prana Vayu* in the upward direction, they will increase the heat which may cause heavier bleeding and will also put excessive pressure on the abdominal region.
4. *Bandhas* should be avoided. With consideration on a *Prana* level they move the *Apana Vayu* upwards instead of down and physically they add more contraction to an already tight region and in the case of *Uddiyan bandha* increasing the heat leads heavier bleeding.

#### AFTER MENSTRUATION

After the menstruation period one has to begin with the following *Asanas* and *Pranayama* to help to the organs to recover from menstruation, balance hormones levels,

re-establish a balanced mental state and prepare the body for next cycle.

- *AdhoMukhaSvanasana* (Downward Dog pose)
- *Pascimottanasana* (Seated forward bend)
- *Supta Baddha Konasana* (Reclining butterfly pose)
- *Sarvangasana Setu-bandha* (Bridge posture)
- *Ujjayi Pranayama* I and II (Ocean breath)
- *Anuloma Viloma Pranayama* I and II (Alternative nostril breathing)
- *Surya Bhedana Pranayama* (Right nostril breathing)

#### Menstrual Disorders<sup>[10]</sup>

The pressure of living up to expectations adds to the stress of a hectic schedule. This stress, along with other aspects of modern life, such as change in food habits, lack of physical exercise can contribute to the breakdown of the immune system and disturbances of the hormonal system.

Menstrual disorder is one of the most common problems in the women of the reproductive age group. A menstrual disorder is a physical or emotional problem interfering with the normal menstrual cycle, causing pain, excessive bleeding, delayed cycle, delayed menarche, and missed periods. A number of diseases related with menstruation respond well with the practice of Yoga. Regular and proper practice of the *Asanas* and *Pranayama* is beneficial for menstrual disorders.

MENSTRUAL DISORDER	ASANSA
Amenorrhoea	<i>Pindasana</i> in <i>Sirsasana</i> (Headstand pose), <i>Halasana</i> (Plough pose), <i>Bhujangasana</i> (Cobra pose).
Dysmenorrhoea	<i>Baddhakonasana</i> (Bound angle pose) <i>Virasana</i> cycle (Hero pose), <i>SuptaVirasana</i> (Reclining hero pose)
Menorrhagia	<i>Uttanasana</i> (Standing forward bend), <i>Pascimottanasana</i> (Seated forward bend), <i>Kurmasana</i> (Turtle pose)
Metrorrhagia:	<i>Dandasana</i> (Staff pose), <i>Malasana</i> (Squat pose), <i>Salamba Sirsasana</i> (Headstand pose)
Hypomenorrhoea	<i>Vrksasana</i> (Tree pose), <i>UtthitaTrikonasana</i> (Triangle pose), <i>ArdhaCandrasana</i> (Half-moon pose)
Oligomenorrhoea:	<i>Salamba Sarvangasana</i> (Supported shoulder stand), <i>Karnapidasana</i> (Ear pressure pose) <i>Ustrasana</i> (Camel pose)
Polymenorrhoea:	<i>JanuSirsasana</i> (Head-to-knee pose), <i>Maricyasana</i> I (Sage pose) <i>Siddhasana</i> (Accomplished pose)
Premenstrual tension:	<i>Matsyasana</i> (Fish pose) <i>Maha Mudra</i> , <i>Viloma Pranayama</i> I and II

#### MENOPAUSE

Just as menarche, menopause is another physiologic state in the life of a woman. Menopause is a natural biological process and a point in life that all women experience.

Menopause is defined as permanent cessation of menstruation that occurs at mean age of 50 years.<sup>[11]</sup> A woman spends almost a one third of her life in this

phase.<sup>[12]</sup> This phase shows the end of natural fertility in a woman.

Around 20% of the patients suffer from severe menopausal symptoms, 60% suffer from mild symptoms and 20% may have no symptoms at all.<sup>[13]</sup> During menopause transition, fluctuating estrogen and progesterone levels manifest in uncomfortable psychological, somatic, and vasomotor symptoms. The most common menopausal symptoms include hot flashes, night sweats, fatigue, pain, tiredness, insomnia, and weight gain, lack of concentration, urinary frequency, vaginal dryness, decreased libido, and mood swings. These symptoms vary in severity and character from person to person.

Since estrogen deficiency is the cause of perimenopausal symptoms, hormone replacement therapy (HRT) is the most effective treatment. But, hormone replacement therapy (HRT) has been associated with an increased risk of breast cancer, uterine cancer, thromboembolic heart disease and stroke. Today more women are becoming aware of the serious side-effects; hence the use of HRT for menopausal symptoms has decreased. Considering the limitations of contemporary treatment i.e. HRT, *Yoga* can be adopted as complementary therapy.<sup>[14,15]</sup> *Yoga* is the non hormonal, non pharmacological way of managing menopause.

The following *Asanas* give a soothing sensation to the nerves:

- *Prasarita Padottanasana* (Wide Stance Forward Bend)
- *Adhomukha Svanasana* (Downward Dog pose)
- *Paschimottanasana* (Seated forward bend pose)
- *Salamba Sirsasana* (Supported Headstand pose)

#### **Benefits of *Yoga* during menopause**

Practice of *Yoga* on regular basis help to reduce the effects of menopausal symptoms. But a *Yoga* practice cannot directly affect estrogen production, In particular, *Hath Yoga*, restorative postures can help to calm the nervous system by turning down the sympathetic nervous system (fight or flight response) and supporting activation of the parasympathetic nervous system (relaxation response), as well as enhances functioning of the endocrine system thereby supporting the body in adapting to hormonal fluctuations.

With the menopause the risk of cardiovascular diseases (CVD) rises commonly due to the co-incident increase in insulin resistance and related atherogenic changes together comprise the metabolic or insulin resistance syndrome, a cluster of metabolic and hemodynamic abnormalities strongly implicated in the pathogenesis and progression of cardiovascular diseases (CVD).<sup>[16]</sup> There are evidences suggesting the practice of *Yoga* can decrease both psychological and physiological risk factors for cardiovascular diseases (CVD) and may

reduce signs, complications and improve the prognosis of those with clinical or underlying disease.<sup>[17,18]</sup>

#### ***Pranayama***

*Pranayama* strengthens mental concentration, induces relaxation. Psychological stress is a general trigger of hot flashes. Practices with relaxation and deep abdominal breathing have been found to be effective for mitigating mild to moderate hot flashes.<sup>[19]</sup> Also it is known that the meditation techniques in *yoga* bring about a clear change in perception, attention and cognition.<sup>[20]</sup> *Yoga* actually showed an improvement in cognitive function.<sup>[21]</sup> Practice of *Ujjayi Pranayama* I, *Viloma Pranayama*, *Surya Bhedana Pranayama* are beneficial.

#### ***Dhyana***

*Dhyana* (meditation) aims at mental clarity. Increases plasma melatonin levels and melatonin effectively improves sleep quality. Studies have demonstrated the effectiveness of *Yoga* in improving sleeping patterns suggests its effective use in a clinical setting to combat symptoms of insomnia and other sleep disorders in post-menopausal women.<sup>[22]</sup> Hence *Yoga* as an alternative therapy is safe, free from side effects, could definitely be a choice for reducing menopausal symptoms and promoting quality of life.

#### **DISCUSSION**

No knowledge is gained instantly. In fact, knowledge has a beginning but no end. This is all the more true of *Yoga*. One's progress in this field depends entirely on one's inner strength and endurance. Unlike other systems, *Yoga* aim is to develop symmetry, coordination, and endurance in the body. It activates the internal organs and makes them function harmoniously. The progress is slow but certain. None can deny the advances of modern medical science. Drugs and medicines can be of great help, but *Yoga* can complement them and speed up the process of recovery where medication is being used. Sometimes drugs and medicines have harmful side-effects and *Yoga* helps to counteract them. *Yoga* strengthens the body's natural defenses to fight with disease.

From the onset of puberty to the menopause, a woman's body endures a lot of physical and mental strain. Hence regular practice of *Yoga* is very beneficial for women. *Yoga* can provide innumerable benefits to women like improving reproductive system, helping in natural child birth, giving complete workout to the body.

Healthy menstruation indicates healthy state of body. During this period body undergoes lot of changes physiologically and psychologically. Due to life style modifications there is breakdown of immune system and alter in hormonal system causing various conditions like, fibroid tumors, endometriosis, ovarian cyst, menstrual disorders. Here *yoga* plays vital role. *Yoga* reduces the psychological conditions like stress, tension, depression and anxiety.

Menopause is the time of wisdom for the woman. This is a critical period of adjustment. Menstruation either stops suddenly or becomes irregular, or the quantity lessens. All these are natural signs that the reproductive functions are coming to an end. Just as at the beginning of menstruation physical, physiological, and psychological disturbances occur, women again have to face disturbances at the stage of menopause. *Yoga* is proven to be effective for managing menopausal symptoms in total and also domain wise. *Yoga* promotes positive psycho-physiological changes in post-menopausal women and may be applied as a complementary therapy towards this population. At this juncture, practice of *Yogasanas* is extremely beneficial, as it calms the nervous system and brings equipoise. Hence it is never too late to begin.

### CONCLUSION

Adolescence is a great time to the practice of *Yoga*. It will not only help to develop a healthy and regular menstrual cycle, but it will also help you deal with mental changes. *Yoga* is highly effective and is highly recommended to all women of menopausal age. *Yoga* undoubtedly, brings about changes in physical, mental, and moral well-being. However, since *Yoga* practice is very personal, each *Asana* is tailored to the individual body. Hence *Yoga* as a safe alternative therapy without side effects can be an option for improving the quality of life for women from menarche to menopause. *Yoga Asana* and *Pranayama* as part of her way of life, they will be even more meaningful and advantageous to her. So it's never too late to start. It will support a woman throughout all the stages of her life.

### REFERENCES

1. Alyson Ross and Sue Thomas. The health benefits of yoga and exercise. A review of comparison studies. The journal of Alternative and complementary medicine, 2010; 16(1): 3-12.
2. Lasater J. The heart of pantajali. *Yoga J.*, 1997; 137: 134-44. [Google Scholar]
3. Raub JA. Psychophysiologic effects of hatha yoga on musculoskeletal and cardiopulmonary function: A literature review. *J Altern Complement Med.*, 2002; 8: 797-812. [PubMed] [Google Scholar]
4. Vaze N, Joshi S (2010) Yoga and menopausal transition. *J Midlife Health*, 1: 56-58.
5. Stevens P. What is meditation. *J Yoga Ontogenet Andtherap Investig*, 2010; 2: 16.
6. Sahay BK. *Yoga in medicine*. API textbook of medicine. 5th ed. 1995; 1444-5.
7. D.C.Dutta, *Textbook of Gynecology*, fourth edition, page no.74.)
8. *The womens Yoga Book* By Bobby Clennell page no.47-49.
9. <https://www.yogapoint.com/yoga-poses/yoga-for-menstruation.htm>
10. *Yoga –a gem for women* by Geeta Iyengar on menstrual disorders; 97-99.
11. WhelnTJ, GossPE, IngleJN, Pater JL TUDS, Pritchard K et.al. Assesment of quality of life, In M.A. 17: A Randomized placebo controlled Trial. *JClin Oncol*, 2005; 23: 6931-40 Pub Med. [www.ncbi.nlm.nih.gov](http://www.ncbi.nlm.nih.gov)
12. US Census Bureau 1996 Global aging into the 21st century. The wall chart by US.
13. Turnbull S. Yoga as a treatment for menopausal symptoms. *J Yoga Ontogenet Andtherap Investig*, 2010; 2: 14-5.
14. Cohen L, Wameke C. Psychological Adjustment and sleep quality: A randomized trial of the effects of a Tibetan Yoga intervention in patients with lymphoma. *Cancer*, 2004; 100: 2253-60.
15. Khalsa SB. Treatment of chronic Insomnia with Yoga: A preliminary study with sleep wake diaries. *Appl Psycho Physiol Biofeed Back*, 2004; 29: 269-78.
16. A. Risk indices associated with insulin resistance syndrome, cardiovascular disease, and possible protection with Yoga: A systematic review. *J Am Board FamPract*, 2005; 18: 491-519.
17. Chattha R, Nagarathna R, Padmalatha V, Nagendra HR (2008) Effect of yoga on cognitive functions in climacteric syndrome: A randomized control study, *BJOG*, 115: 991-100.
18. Innes KE, Selfe TK, Taylor AG. Menopause, the metabolic syndrome and mind-body therapies. Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2810543/>, page1- 12. [Cited in 2010].
19. Zman LC, Edelberg R, SwartKemmann E (1990) Impact of stress on objectively recorded menopausal hot flushes and on flush report bias. *Health Psychol*, 9: 529-545.
20. Keefer L, Blanchard EB (2005) Hot flash, hot topic: Conceptualizing menopausal symptoms from a cognitive-behavioral perspective. *Appl Psychophysiol Biofeedback*, 30: 75-82.
21. Brown DP (1977) A model for the levels of concentrative meditation. *Int J ClinExpHypn*, 25: 236-273.
22. Khalsa SB. Treatment of chronic Insomnia with Yoga: A preliminary study with sleep wake diaries. *Appl Psycho PhysiolBiofeed Back*, 2004; 29: 269-78.