



IMPACT OF PRANAYAM AND YOGA PRACTICE IN CASE OF UNEXPLAINED INFERTILITY

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Article Received date: 13 February 2024

Article Revised date: 04 March 2024

Article Accepted date: 24 March 2024



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ABSTRACT

Yoga therapies have found to improve reproductive functions both in men and women by improving the overall integration of physiological systems. Studies have shown that yoga therapy orchestrates fine tuning and modulates neuroendocrine axis which results in beneficial changes. It mainly improves reproductive functions by reducing stress and balancing the neurohormonal profile. It also reduces urinary excretion of catecholamines, and aldosterone, decreases serum testosterone and luteinizing hormone (LH) levels and an increases cortisol excretion, indicating optimal changes in hormonal profiles. Alterations in brain waves (basically an increase in alpha waves) and decrease in serum cortisol level was observed during yoga therapy. Yoga practices including physical postures, breathing, and meditation in pregnant women are found to cause an increase in child birth weight, decrease in preterm labor, and decrease in intrauterine growth restriction (IUGR). So in this article we are giving detail description of impact of pranayam and yoga practice in case of unexplained infertility

KEYWORDS: Infertility, Yoga, Pranayama, Ayurved.

INTRODUCTION

In Indian religions, yoga (from the Sanskrit word meaning “yoking” or “joining”) is “the means or techniques for transforming consciousness and attaining liberation (moksha) from karma and rebirth (samsara).”^[1] It is “a practice by means of which a spiritual seeker strives, (1) to control nature to make the soul fit for union with the Oversoul (the true Self or Atman-Brahman or “God”), and (2) to attain union with God and thus the liberation of the soul from the rounds of rebirth and death.”^[2] Yoga is popularly understood to be a program of physical exercises (asana) and breathing exercises (pranayama). Yoga began in India as early as 3000 B.C. according to archeological evidence.^[3] It emerged in the later hymns of the ancient Hindu texts (Upanishads or Vedanta) (600–500 B.C.). It is mentioned in the classic Indian poem Mahabharata (400 B.C. - 400 A.D.) and discussed in the most famous part of that poem, the Bhagavad Gita. Yoga was systemized by Patanjali in the Yoga Sutras (300–200 B.C.). Patanjali defined the purpose of yoga as knowledge of the true “Self” (God) and outlined eight steps for direct experience of “Self.” Yoga, as practiced and taught in

India, entered the Western world in the 19th century with the translation of basic yogic texts. Following attendance at the World Parliament of Religions in Chicago in 1893, Swami Vivekananda introduced yoga to the USA. He lectured widely on the practice, founded the Vedanta Society, and authored many books.^[4] Then yoga was promulgated in the West by the numerous teachers who studied in eastern countries (principally India), many of whom immigrated to America in the early 20th century. In the 20th century numerous versions of yoga were developed and taught. Numerous books aided the growth of a yoga practicing community in the USA. In the 1950s, “an almost faddish burst of interest in hatha yoga” occurred in the USA. During the decade, yoga spread through health and beauty salons.^[5] Indian teachers immigrated to the USA during this period, founding centers and publishing books that helped to popularize the movement. In the 1950s and 1960s several important books were published on yogic techniques and then in 1970s yoga rapidly expanded, with the founding of numerous yoga centers and professional associations. Yoga became especially popular among adherents of New Age ideas.^[6]

Women who have infertility-related psychological distress, anxiety, and depression often are reluctant to use psychotropics and seek nonpharmacological therapies.^[7] Traditional systems of healing such as Yoga have recently gained attention as a popular nonpharmacological treatment in management of common mental disorders such as anxiety and depression.^[8] Yoga is a holistic lifestyle-based intervention which focuses on regulating the lifestyle through mind–body practices. Major components of Yoga-based lifestyle are: asanas (physical postures), pranayama (breathing techniques), meditation (mindfulness), relaxation techniques (yoga nidra, instant relaxation technique, quick relaxation technique, deep relaxation technique), chanting (Om, A, U, M, AUM), and yogic counseling. Yoga has been found to be effective in treatment of anxiety, depression, and psychological distress (both as an adjuvant and as sole therapy).^[9] Yoga also has a positive effect on stress reduction in healthy adults.^[10] Similarly, mindfulness-based therapies have been found to be useful in anxiety and other mood disorders in the clinical population.^[11] Thus, the current paper focused on a narrative review to assess the effectiveness of yoga therapy in reducing psychological distress among women undergoing infertility treatment.

The chance of conceiving increases by doing Yoga and Pranayama. Yoga can be divided and better understood in three parts.

1. Physical: Different postures of yoga lead to physical benefits. It helps in breaking down scar tissue and helps in releasing musculature.

Few Physical yoga that you should try: Standing Poses, Hip Opening, and Viparita Karani.

2. Physiological: Not only physical yoga meant for improving your fertility. Even regular practice of Physiological yoga can help you come out of stress and pressure and live life to the fullest. This Physiological yoga puts a good impact on your nervous and endocrine systems too.

Few Physiological yoga that you should try: Chest openers and Twists, Sarvangasana, and Restoratives.

3. Emotional: Fertility yoga removes the fear one can face at the time of conceiving. It reduces your stress and makes you calm in different situations.

Few Emotional yoga that you should try: Yoga Nidra, Bhamari breath, Meditation.

Amazing fertility benefits of yoga

1. Strengthens the Endocrine System: Your body's Endocrine System plays a very important role in your fertility. It helps in maintaining your hormonal balance.

Doing proper and regular yoga can help in strengthening your Endocrine System.

2. Reduces Stress: Stress is the major reason for infertility and doing yoga can help you come out of stress and enjoy your life.

3. Encourages a more positive mindset: Yoga helps in keeping negative thoughts away from you. It is a great source to bring n yourself a positive mindset.

4. More blood flow to the reproductive organs: Increasing blood flow to the reproductive organs can increase the chance of better fertilization. The more the flow of blood more is the supply of oxygen.

DISCUSSION

Reproductive functions and pregnancy Studies have shown that practice of yoga orchestrates fine tuning and modulates neuro-endocrine axis which results in beneficial changes in the practitioners. Schmidt et al. found a reduction in urinary excretion of adrenaline, noradrenaline, dopamine, and aldosterone, a decrease in serum testosterone and luteinizing hormone levels and an increase in cortisol excretion, indicating optimal changes in hormones. Kamei et al.^[12] found changes in brain waves and blood levels of serum cortisol during yoga exercise in 7 yoga instructors and found that alpha waves increased and serum cortisol significantly decreased. Narendran et al.^[13] found that yoga practices including physical postures, breathing, and meditation practiced by pregnant women 1 h daily resulted in an increase in birth weight, decrease in preterm labor, and decrease in IUGR either in isolation or associated with PIH, with no increased complications. Beddoe et al.^[14] found that women practicing yoga in their second trimester reported significant reductions in physical pain from baseline to post intervention. Women in their third trimester showed greater reductions in perceived stress and trait anxiety. From this, it is clear that yoga can be used to prevent or reduce obstetric complications. Stress and anxiety Since the 1970s, meditation and other stress-reduction techniques have been studied as possible treatments for depression and anxiety. One such practice, yoga, has received less attention in the medica literature though it has become increasingly popular in recent decades. Available reviews of a wide range of yoga practices suggest they can reduce the impact of exaggerated stress responses and may be helpful for both anxiety and depression. It mainly acts via down-regulating the HPA axis that trigger as a response to a physical or psychological demand (stressor), leading to a cascade of physiological, behavioral, and psychological effects, primarily as a result of the release of cortisol and catecholamines (epinephrine and norepinephrine).^[15] This response leads to the mobilization of energy needed to combat the stressor through the classic “fight or flight” syndrome. Over time, the constant state of hypervigilance resulting from repeated firing of the HPA axis can lead to deregulation of the system and ultimately

diseases such as obesity, diabetes, autoimmune disorders, depression, substance abuse, and cardiovascular disease.^[16,17]

CONCLUSION

Yogasan affects one's entire identity. Audit considered the possibility that modern lifestyle choices and stress are primarily to blame for unusual conditions like infertility. According to a survey, yoga poses, which are a component of yoga therapy, are crucial in treating infertility.

Nowadays, infertility is one of the worst problems that couples face. People who practice yoga may find it easier to cope with the challenges of infertility. Simple posture, breathing, relaxation, and meditation techniques would encourage ripeness. Specific positions, mantras, and breathing techniques are all part of the practices. By stimulating hormone levels and improving circulation and supplementation to regenerating organs such as the ovaries, eggs, tubes, uterus, testicles, and prostate, these activities increase richness.

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