



Yoga: Its Role In Health & Disease

“All bringing of the mind into a higher state of vibration is included in one word in yoga”

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Abstract

Thousands of years ago yoga originated in India, and in present day and age, an alarming awareness was observed in health and natural remedies among people by yoga and pranayama which has been proven an effective method for improving health in addition to prevention and management of diseases. With increasing scientific research in yoga, its therapeutic aspects are also being explored. Yoga is reported to reduce stress and anxiety, improves autonomic functions by triggering neurohormonal mechanisms by the suppression of sympathetic activity, play vital role in health and well-being of an individual.

Keywords: Anxiety, cancer, hypertension, pranayama, stress, yoga

Introduction

Yoga is an ancient discipline designed to bring balance and health to the physical, mental, emotional, and spiritual dimensions of the individual. It is long popular practice in India that has become increasingly more common in Western society. “Yoga” means union of our individual consciousness with the *Universal Divine Consciousness* in a *super-conscious* state known as *Samadhi*.¹ The book of *Rigveda*, mentions about yogic meditation by the wise, while *Yajurveda* exhorts us to practice yoga for enhancing mental health, physical strength, and prosperity. Ancient Indian *rishis* understood that performing *Raja-yoga* (procedure of concentration to liberate soul or *atma* from the bondage of *maya* into *paramatma*) always need a healthy body – “*Sharirmadyam, khalu dharma sadhanam*.” So, they developed “*Hatha yoga*,” which includes *asana*, *mudra*, *pranayama*, etc. “*Hatha yoga-pradipika*” again differentiates all asanas into four basic classes – *sidhyasana*, *padmasana*, *sinhasana*, and *vadrasana*. Besides, asana may be of two types – *dhyanasana* in which a posture keeps spinal cord free and center of gravity shifts to other part like ribs and *shasthyasana* to get healthy body. “*Gharanda*

samhita” said there were 84 lakh asanas from which 16 000 were best and only about 300 are popular.²

Knowledge, Practice & Challenges On Yoga

The latest ‘global action plan on physical activity’, by the WHO stresses health and wellness as an outcome of being ‘active’. Health is a broad concept, finding its roots in physical, mental, social, and spiritual wellness. In this context, public health delivery is critical for provisioning an evidence-based integration of alternative approaches for the public good. This is possible by analysing health-seeking behaviour based on the knowledge–practice gap in the population. These gaps are evidenced by following literature,

Sonali Jaiswal, Vikram Pai, Meghnath Verma, (2024) conducted a cross-sectional, observational, survey on knowledge, attitude, and practice towards yoga among healthcare professionals to assess quantitative and qualitative information. A total of 372 healthcare professionals, including faculty, junior residents, senior residents, nursing staff, MBBS, and nursing students of AIIMS, Raipur, were included in the study. Data was collected by closed-ended Questionnaire- over 2 months. The study findings revealed 210 (69.3%)] believed that Yoga is Mind-

body and spiritual practices, whereas 73 (24.09%) believed that Yoga is stretching, breathing, and meditation techniques for stress relief. Only 14 (0.04%) defined Yoga as a kind of physical exercise. Interestingly, 169 (55.78%) people responded that practice of Yoga cannot lead to any kind of injury. Around 154 (50.83%) people gave physical fitness as a reason to start Yoga, and about one-fourth [76 (25.08%)] of the people started Yoga as a part of school education. Around 51.16% of people found Yoga to be better than the gym, dance, or Zumba. It was also observed that among health professionals who had been practicing Yoga since a long time in 73.60% quite due to various reasons but only 18.48% are currently practicing Yoga. The study concluded that the survey indicates that adequate knowledge, the familiarity with Yoga, and a positive attitude toward Yoga are found to be present among healthcare professionals. But lack of practice due to various barrier and the healthcare organization has to take some initiative to participate yoga very effectively.²²

Amit S Mishra, Rajesh SK , Vadiraja HS , Raghuram Nagarathna , Akshay Anand , Himshikha Bhutani , Madhava Sai Sivapuram et al. (2020), conducted a study to examine the knowledge, attitudes, and practice gap of yoga across India based on implicit perceptions. The nationwide door-to-door survey conducted using a questionnaire/screening form. The data were collected from a national survey conducted under the *Niyantrit Madhumeh Bharat* (NMB) program initiated by The Ministry of Ayurveda, Yoga, Unani, Siddha, Homeopathy (AYUSH), Government of India, from all major zones of the country. A total of 162,330 participants who joined the NMB program were recruited in our study. The study finding revealed that out of the total respondents to the survey, it was observed that 11.8% practice yoga, which was highest in the north zone and lowest in the east zone . Out of 101,643 respondents, 94,135 of the individuals who participated in the survey believed that yoga improved their lifestyle, and 90,102/98,518 believed that yoga prevented diabetes, revealing a huge knowledge–practice gap. The study concluded that the scale of the knowledge–practice gap coupled with the general acceptability of yoga calls for a change in the conventional healthcare provisions by its integration with modern medicine. The population-wide positive perceptions about yoga as a preventive health tool can

not only catalyze consensus disease-specific yoga modules but also bridge the knowledge–practice gap that exists because of limited yoga centers and professionals.²³

ROLE OF YOGA IN HEALTH & DISEASE

1. Yoga improves flexibility, balance and strength

A key part of yoga involves stretching the muscles, which can help to improve flexibility and balance. Yoga seems to be especially helpful for improving flexibility in adults ages 65 and older. Reduced flexibility is a natural part of aging, risk of fall, injury and found that yoga both slowed down loss and improved flexibility in older adults.³ A 2021 meta-analysis found yoga to be an effective strength-building practice that may help to target both upper and lower limbs.⁴

2. Yoga improves mental health

stress relief

Yoga can reduce depressive symptoms by alleviating stress. Studies have shown that yoga can reduce inflammation, maintain autonomic balance and also has a role in maintaining the Neurotransmitters. It has role on hypothalamic–pituitary–adrenal (HPA) axis, Peripheral Nervous system including GABA, Limbic System activity, inflammatory and endocrine responses. Yoga along with antidepressants can help in reducing the depressive symptoms, developing blood pressure and cardiovascular disease. Yoga is an ideal complementary and alternative therapy for mental health disorders.⁵

It is important to remember that physical practice is just one aspect of yoga. Meditation, breath work, and auditory rituals, like chanting and sound bath, have also been shown to tension and relieve stress increasing the production of neurotransmitters such as serotonin and dopamine.⁶ Numerous studies suggest that yoga asana may be effective as an alternative treatment for anxiety disorders, though several of the researchers suggest that further research is still needed to confirm this. **Yoga nidra**, which is a body scan meditation, has been shown to reduce the symptoms of anxiety.⁷

6. Yoga may improve quality of life

There are several factors that can affect quality of life (QOL), such as relationships, learning opportunities, health, and material comforts. A 2019 meta-

analysis shows promising potential for yoga to improve QOL in people with chronic pain in people with conditions such as arthritis, fibromyalgia, and back pain.⁸

7. Yoga may boost immunity

Chronic stress can negatively affects the immune system. When the immunity is compromised, and more susceptible to illness. The research is still evolving, but some studies have found a distinct link between practicing yoga (especially consistently over the long term) and better immune system functioning. This is due in part to yoga's ability to fight inflammation and in part to the enhancement of cell-mediated immunity.⁹

8. Yoga may improve cardiovascular functioning

Yoga has been shown to have a positive impact on various diseases and health conditions. Some of the benefits of yoga include pranayama, often referred to as "yogic breathing," is an important and beneficial aspect of yoga.¹⁰In 2019, the Journal of Ayurveda and Integrative Medicine published a review of 1,400 studies looking at the overall effects of pranayama. One key takeaway was that yogic breathing can improve the functioning of several systems in the body lung function and reduce symptoms of COPD.¹¹Specifically, the research summarized that the cardiovascular system benefited hugely from controlling the pace of breathing. This research indicates that yogic breathing may influence the function of the heart, brain, and lungs also improve insulin sensitivity and reduce blood sugar levels in people with type 2 diabetes.¹²

9. Yoga may help improve sleep

When measuring sleep, researchers look at a person's ability to fall and stay asleep. insomnia can affect the physical and mental health. Yoga has been shown how quickly people fall asleep and how deeply they stay asleep. This is partly due to the after-effects of exercise and the mental calming and stress relief provided by yoga specifically.¹²

10. Yoga may improve self-esteem

Body image and self-esteem are often particularly challenging for adolescents and young adults. The good news is that several recent studies show positive when using yoga to improve self-esteem and perceived body image in these populations.¹³

11. Yoga can promote better posture and body awareness

As a modern society reliant on technology, we seem to be spending more and more time sitting or hunched over devices. However, a 2020 review of research studies found an emerging pattern: yoga improved brain functioning in the centers responsible for interoception (recognizing the sensations within your body) and posture. Try adding yoga poses during breaks in workouts to promote better posture.¹⁴

12. Yoga can help with burnout

It seems like **Burnout**— excessive exhaustion that affects one's health — is at an all-time high. A 2021 study findings showed that examined burnout among hospice workers during the COVID-19 pandemic concluded that yoga-based meditation interventions significantly reduced the effects of burnout by improving interoceptive (body) awareness. The ability of yoga is to notice internal signals and respond appropriately also may help people become more in tune with, and even more likely to listen to, their body's signals.¹⁵

COMMON CHALLENGES

Practicing yoga comes with several challenges that can be broadly categorized into physical, mental, and emotional hurdles.

Physical Challenges

- **Flexibility Issues:** Limited flexibility can make it difficult to perform certain poses, especially for beginners. Tight hamstrings, limited range of motion, and muscle imbalances can hinder progress.
- **Strength Limitations:** Yoga requires a significant amount of strength, particularly in the core and upper body. Poses like Chaturanga and arm balances can be challenging for those who haven't developed the necessary strength.
- **Physical Discomfort or Pain:** Practitioners may experience discomfort or pain due to improper alignment, overstretching, or underlying health conditions^{16,17}

Mental Challenges

- **Difficulty in Concentration:** Many practitioners struggle to focus during their practice, often getting distracted by thoughts or their surroundings. Establishing a pre-practice routine, such as deep breathing or setting an intention, can help improve concentration.
- **Mental Blocks and Self-Doubt:** Negative self-talk and self-doubt can significantly impact progress in yoga. Changing one's mindset and recognizing limiting thoughts can help overcome these mental barriers.
- **Patience and Persistence:** Yoga requires patience and persistence, as progress may be slow, and it's essential to focus on the journey rather than the destination ^{16,17}

Emotional Challenges

- **Emotional Release During Practice:** Yoga can evoke strong emotions, and practitioners may need to develop strategies to manage these feelings.
- **Frustration and Expectations:** Practitioners may experience frustration due to perceived slow progress or unrealistic expectations. Learning to manage these feelings and cultivate self-compassion is essential ^{18,19}.

RECOMMENDATIONS TO OVERCOMEING ABSTACLES

Physical Challenges

- **Gradual Stretching Techniques:** Incorporate safe and gradual stretching techniques to improve flexibility. Poses like Downward Dog, Pigeon Pose, and Triangle Pose can help increase flexibility and balance.
- **Modify Poses:** Utilize props like blocks, straps, or bolsters to modify poses and make them more accessible. For example, placing a block under your hands in a forward fold can reduce strain.
- **Core Strengthening:** Focus on strengthening your core through poses like Plank and Boat Pose to improve balance and stability ^{20,21}.

Mental Challenges

- **Set Intention:** Start your practice with a clear intention to focus your mind and let go of distractions.
- **Practice Mindfulness:** Stay present by focusing on your breath or sensations in your body during each pose.
- **Positive Affirmations:** Repeat affirmations like "I am focused and present" to reframe negative thoughts ²².

Emotional Challenges

- **Self-Compassion:** Practice kindness and patience with yourself, embracing self-compassion as an integral part of your yoga practice.
- **Let Go of Expectations:** Release preconceived ideas about what your practice should look like or what progress you should be making. Focus on being present in each moment.
- **Connect to Something Greater:** Tap into a higher purpose beyond personal benefit by dedicating your practice to something greater than yourself ²³.
- **Create a Support System:** Join a community of fellow yogis who share similar goals to provide accountability and encouragement.
- **Mix It Up:** Explore different styles of yoga or try new classes with various instructors to keep your practice fresh.
- **Document Your Journey:** Track your progress and reflect on your experiences to stay motivated and committed ^{20,23}
- **Consistency:** Establish a regular practice routine, even if it's just 10-15 minutes a day.
- **Seek Guidance:** Work with an experienced yoga instructor to provide personalized guidance and help overcome specific challenges.
- **Listen to Your Body:** Pay attention to your body's limitations and take regular breaks to avoid injury ²³

CONCLUSION

Yoga is a holistic practice that offers numerous benefits for both physical and mental health. Regular yoga practice can help prevent and manage various non-communicable diseases, such as heart disease, diabetes, and certain cancers. By reducing stress, improving physical function, and promoting healthier habits, yoga can contribute to overall well-being and quality of life. Whether looking to improve physical health, manage a chronic condition, or simply reduce stress, yoga is a valuable tool that can be adapted to suit the person's needs.

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