

Therapeutic Benefits of Yoga in Physical and Mental Health: A Comprehensive Review

Ghanshyam Patidar¹, Rohitash Godara², Deepak Vishwakarma³
Akanksha Mishra⁴, Sanchaita Samaddar⁵

¹Professor, Jai Narayan College of Nursing (JNCT Professional University) Bhopal

²Principal, Arawali College of Nursing, Sikar

³Associate Professor, School of Nursing Sri Satya Sai University of Technology and Medical Science Pachama, Sehore

⁴Professor, Sri Satya Sai University of Technology and Medical Sciences Sehore, M.P.

⁵Assistant Professor (Mental Health Nursing) Hanumant Institute of Nursing,
Nesvad Devaliya Bypass NH-51 Mahuva, Gujrat

Corresponding Author:

Prof. Dr. Ghanshyam Patidar, Professor, Jai Narayan College of Nursing
(JNCT PROFESSIONAL UNIVERSITY) BHOPAL

E-mail:

ghanshayampatidar@jnctpu.edu.in

GFNPSS-International Journal of Multidisciplinary Research is a journal of open access. In this journal, we allow all types of articles to be distributed freely and accessible under the terms of the creative common attribution- non-commercial-share. This allows the authors, readers and scholars and general public to read, use and to develop non-commercially work, as long as appropriate credit is given and the newly developed work are licensed with similar terms.

How to cite this article: Patidar G, Godara R, Vishwakarma D, Mishra A, Samaddar S. Therapeutic Benefits of Yoga in Physical and Mental Health: A Comprehensive Review. GFNPSS-IJMR 2026; 7:7: 3525-3528

Submitted: 05 July 2026: **Accepted:** 15 July 2026: **Published:** 31 July 2026

Abstract

Yoga is an ancient mind-body practice that integrates physical postures (asanas), breathing techniques (pranayama), meditation (dhyana), and relaxation. Over the past few decades, scientific evidence has increasingly supported the therapeutic role of yoga in promoting physical and mental health. Yoga has been shown to improve cardiovascular fitness, musculoskeletal flexibility, respiratory function, metabolic health, stress management, emotional well-being, and quality of life. It has also emerged as an effective complementary therapy for chronic diseases such as hypertension, diabetes mellitus, obesity, anxiety, depression, chronic pain, and cancer rehabilitation. This review summarizes current evidence regarding the therapeutic benefits of yoga, discusses its physiological and psychological mechanisms of action, and highlights its clinical applications in health promotion and disease management. The review concludes that yoga is a safe, cost-effective, and evidence-based complementary intervention that can be integrated into routine healthcare and public health programs.

Keywords: Yoga, Physical Health, Mental Health, Complementary Therapy, Stress, Depression, Wellness

Introduction

Yoga is a holistic approach to health and well-being that dates back over 5,000 years to ancient India. To encourage balance between the body and mind, it incorporates physical activity, breathing exercises, meditation, and mindfulness.¹ The Sanskrit word Yuj, which means "to unite" or "to join," is where the word "yoga" originates, signifying the integration of the mental, emotional, spiritual, and physical aspects of

wellness.

Yoga has become widely acknowledged as an evidence-based alternative and integrative therapy for the prevention and treatment of a range of physical and psychological conditions in recent years.³ Regular yoga practice enhances flexibility, muscular strength, balance, cardiovascular health, respiratory efficiency, metabolic regulation, immunological function, and general quality of life, according to several scientific research and

systematic reviews.⁴ Stress, anxiety, depression, burnout, and sleep difficulties are examples of mental health illnesses that have grown to be significant global public health issues. By controlling autonomic nervous system activity, lowering cortisol secretion, boosting emotional resilience, and strengthening parasympathetic tone, yoga has demonstrated substantial therapeutic potential in lowering psychological discomfort.⁵ Regular yoga practice has also been shown to improve cognitive function, attention, memory, and emotional management.⁶

The physiological mechanisms underlying yoga involve modulation of neuroendocrine pathways, reduction of systemic inflammation, enhancement of vagal tone, improvement of cardiovascular function, and regulation of neurotransmitters such as serotonin, dopamine, and gamma-aminobutyric acid (GABA).⁷ These mechanisms contribute to both physical rehabilitation and psychological well-being.

Given the increasing burden of chronic diseases and mental health disorders, yoga has become an important component of preventive medicine, rehabilitation, and lifestyle modification programs worldwide.⁸ This review summarizes current evidence regarding the therapeutic benefits of yoga in physical and mental health and discusses its applications in clinical practice.

Therapeutic Benefits of Yoga

Cardiovascular Health: Systolic and diastolic blood pressure, resting heart rate, serum cholesterol, and cardiovascular risk factors have all been linked to regular yoga practice. Yoga lowers sympathetic nervous system activity while increasing circulation, autonomic balance, and endothelial function.⁹

Musculoskeletal Health: Yoga enhances flexibility, muscular strength, joint mobility, posture, and balance. It is widely used in the rehabilitation of chronic low back pain, osteoarthritis, neck pain, and musculoskeletal disorders.¹⁰

Diabetes Mellitus: Yoga improves glycemic control through enhanced insulin sensitivity, reduced stress hormone secretion, improved pancreatic function, and healthier lifestyle behaviors. Clinical studies report reductions in

fasting blood glucose and glycated hemoglobin (HbA1c).¹¹

Obesity and Weight Management: Yoga contributes to weight reduction by increasing physical activity, promoting mindful eating, reducing emotional eating, and improving metabolic efficiency.¹²

Respiratory Function: Pranayama improves pulmonary ventilation, respiratory muscle strength, lung capacity, and oxygen utilization. Yoga has demonstrated beneficial effects among patients with asthma and chronic obstructive pulmonary disease (COPD).¹³

Pain Management: Yoga effectively reduces chronic pain associated with arthritis, fibromyalgia, migraine, neck pain, and lower back pain through improved flexibility, muscle relaxation, and modulation of pain perception.¹⁴

Benefits for Mental Health: Stress Reduction: Yoga decreases stress by reducing cortisol levels and activating the parasympathetic nervous system. Regular practice improves resilience against psychological stressors and enhances emotional stability.¹⁵

Anxiety Disorders: Several randomized controlled trials have demonstrated significant reductions in anxiety symptoms following yoga interventions. Improvements are attributed to mindfulness, controlled breathing, and neurochemical regulation.¹⁶

Depression: Yoga serves as an effective adjunctive therapy for mild to moderate depression. It enhances serotonin production, reduces inflammatory markers, and improves emotional well-being and self-esteem.¹⁷

Sleep Quality: Yoga improves sleep duration, sleep efficiency, and overall sleep quality among adults, older individuals, cancer survivors, and patients with insomnia.¹⁸

Cognitive Function: Regular yoga enhances attention, executive function, concentration, working memory, and cognitive flexibility while reducing age-related cognitive decline.¹⁸

Physiological Mechanisms of Yoga

The therapeutic effects of yoga involve multiple biological mechanisms:

- Reduction of sympathetic nervous system activity
- Increased parasympathetic (vagal) tone
- Decreased cortisol secretion
- Improved autonomic nervous system balance
- Reduction in inflammatory cytokines
- Enhanced antioxidant defense
- Improved mitochondrial function
- Increased GABA and serotonin activity
- Better cardiovascular efficiency
- Enhanced neuroplasticity and brain function

Clinical Applications

Yoga has been incorporated into the management of:

- Hypertension
- Type 2 diabetes mellitus
- Coronary artery disease
- Obesity
- Chronic pain
- Arthritis
- Depression
- Anxiety disorders
- Cancer rehabilitation
- Stroke rehabilitation
- Parkinson's disease
- Chronic respiratory diseases
- Women's health
- Geriatric care

Future Perspectives

Although scientific evidence supporting yoga continues to grow, further multicenter randomized controlled trials with standardized intervention protocols and longer follow-up periods are needed. Future research should also investigate dose-response relationships, biological mechanisms, and long-term clinical outcomes across diverse populations.

Conclusion

Yoga is an all-encompassing, holistic, and scientifically supported supplementary therapy that offers significant advantages for mental and physical well-being. In addition to lowering stress,

anxiety, depression, and chronic pain, it enhances cardiovascular fitness, metabolic health, musculoskeletal function, respiratory efficiency, emotional well-being, sleep quality, cognitive performance, and quality of life. Yoga can be successfully included into preventative healthcare, rehabilitation programs, and the management of chronic diseases because to its safety, affordability, and low side effects. Its position in contemporary healthcare will be further strengthened by ongoing research and broader application in clinical practice.

Financial support and sponsorship: Nil

Conflicts of interests: There is no conflict of interest

References

1. Feuerstein G. The Yoga Tradition: Its History, Literature, Philosophy and Practice. Prescott (AZ): Hohm Press; 2008.
2. Iyengar BKS. Light on Yoga. New York: Schocken Books; 1996.
3. Cramer H, Lauche R, Langhorst J, Dobos G. Yoga for depression: A systematic review and meta-analysis. *Depress Anxiety*. 2013;30(11):1068-83.
4. Ross A, Thomas S. The health benefits of yoga and exercise: A review of comparison studies. *J Altern Complement Med*. 2010;16(1):3-12.
5. Streeter CC, Gerbarg PL, Saper RB, Ciraulo DA, Brown RP. Effects of yoga on the autonomic nervous system, gamma-aminobutyric acid, and allostasis. *Med Hypotheses*. 2012;78(5):571-9.
6. Gothe NP, McAuley E. Yoga and cognition: A meta-analysis. *J Phys Act Health*. 2015;12(9):1309-19.
7. Riley KE, Park CL. How does yoga reduce stress? A systematic review. *Health Psychol Rev*. 2015;9(3):379-96.
8. World Health Organization. WHO Traditional Medicine Strategy 2014–2023. Geneva: WHO; 2013.
9. Hagins M, States R, Selfe T, Innes K. Effectiveness of yoga for hypertension. *Evid Based Complement Alternat Med*. 2013;2013:649836.

10. Wieland LS, Skoetz N, Pilkington K, Vempati R, D'Adamo CR, Berman BM. Yoga treatment for chronic non-specific low back pain. *Cochrane Database Syst Rev.* 2017;(1): CD010671.
11. Innes KE, Selfe TK. Yoga for adults with type 2 diabetes: A systematic review. *Evid Based Complement Alternat Med.* 2016;2016 :6979370.
12. Rioux J, Ritenbaugh C. Narrative review of yoga intervention studies for weight management. *Am J Lifestyle Med.* 2013;7(6): 396-409.
13. Donesky-Cuenco D, Nguyen HQ, Paul S, Carrieri-Kohlman V. Yoga therapy decreases dyspnea in chronic respiratory disease. *J Altern Complement Med.* 2009;15(3):225-34.
14. Büssing A, Ostermann T, Lütke R, Michalsen A. Effects of yoga interventions on pain. *J Pain.* 2012;13(1):1-9.
15. Pascoe MC, Thompson DR, Ski CF. Yoga, mindfulness-based stress reduction and stress-related physiological measures. *Psychoneuroendocrinology.* 2017;86:152-68.
16. O Swami. A Study to Assess the Knowledge and Attitude of Adults Regarding Yoga in Stress Management in a Selected Urban Community at Bangalore with a View to Develop an Information Booklet. *GFNPSS Global Nursing Journal of India 2 (II), 125 - 126.* https://scholar.google.com/citations?view_op=view_citation&hl=hi&user=2GqENO8AAAAAJ&citation_for_view=2GqENO8AAAAAJ:An6A6Jpfc1oC

