Journal of Chemical Health Risks

www.jchr.org

JCHR (2025) 15(3), 1472-1474 | ISSN:2251-6727

Yoga as a Complementary Therapy for Asthma: A Narrative Review

[1]Mr. Amit, [2]Dr. Brijesh Kashyap

[1.] PhD Scholar, Himalayan School of Yoga Sciences, Swami Rama Himalayan University.

[2.] (Ph.D)

(Received: 16 March 2025 Revised: 20 April 2025 Accepted: 01 May2025)

KEYWORDS

Asthma, Yoga, Respiratory Function, Quality of Life, Mental Health, Pranayama, Adjunct Therapy

ABSTRACT:

Asthma is a chronic respiratory condition characterized by airway inflammation and breathing difficulties, significantly impacting patients' physiological, psychological well-being, and quality of life. This narrative review synthesizes findings from seven studies investigating the effects of yoga interventions on asthma management. The review explores the influence of yoga on physiological parameters like respiratory function, psychological parameters such as stress and mental health, and overall quality of life in individuals with asthma. The evidence suggests that yoga, as an adjunct therapy, can offer substantial benefits in improving respiratory function, reducing symptoms, enhancing mental well-being, and improving quality of life for asthma patients.

1. Introduction

Asthma affects millions worldwide, posing a significant burden on individuals and healthcare systems. The condition often leads to reduced physical activity, breathlessness, and inflammation in the respiratory system, further exacerbating mental health issues like stress, anxiety, and depression. Consequently, asthma significantly diminishes the quality of life for those affected. While conventional medical treatments play a crucial role in managing asthma, complementary and integrative approaches, including yoga, have gained increasing attention. According to the Global Initiative for Asthma (GINA, 2022), asthma is a common chronic respiratory disease that is characterized by symptoms that can fluctuate in intensity. These symptoms include wheezing, shortness of breath, chest tightness, and coughing, which are frequently combined with variable expiratory airflow limitation. Prevalence estimates for the disease range from 1% to 18% worldwide, indicating that it affects a sizeable section of the population. Approximately 30 million people, or 3% of the population in India, suffer with asthma; the prevalence of the condition is somewhat lower among adults, at 2.4%.

This discrepancy highlights the pervasive influence of asthma on public health, highlighting the need for efficient management techniques and raised awareness to lessen its burden. Genetic predispositions and environmental factors, including as allergens and air pollution, play a complex role in the etiology of asthma, leading to the disease's varying presentation and severity. In addition to patient education about triggers and self-care techniques, management usually entails medication to reduce symptoms and prevent exacerbations. In order to improve asthma control and the quality of life for those who suffer from the condition globally, addressing the issues surrounding asthma necessitates continued research, healthcare policy initiatives, and community actions.

In Hinduism has a long tradition of yoga practice. In modern times, yoga has become widely popular and is practiced all over the world. Its ability to perfectly manage the body, emotions, and mind has been shown to have therapeutic benefits in western nations. Yoga includes breathing techniques, asanas (poses), relaxation techniques, and meditation techniques. This narrative review examines the existing evidence on the effects of yoga interventions on various aspects of asthma management, including physiological parameters, psychological well-being, and overall quality of life.

Effect of Yoga on Physiological Parameters:

Several studies have investigated the impact of yoga on respiratory function in asthma patients. Studies have shown significant improvements in pulmonary function tests (PFTs) like Forced Vital Capacity (FVC), Peak Expiratory Flow Rate (PEFR), and Forced Expiratory

Journal of Chemical Health Risks

www.jchr.org

JCHR (2025) 15(3), 1472-1474 | ISSN:2251-6727

Volume in one second (FEV1) after yoga interventions (1, 3, 5). These improvements are attributed to yoga's ability to enhance chest wall expansion, lung compliance, and strengthen respiratory muscles, including the diaphragm and intercostal muscles (3, 5). One study specifically highlighted the role of voluntarily induced vomiting (Kunjal Kriya), a yogic cleansing technique, in enhancing respiratory muscle endurance and decreasing airway resistance (6). However, it's important to note that not all studies found significant differences in PFT parameters between yoga and control groups (7), suggesting the need for further research.

Effect of Yoga on Psychological Parameters:

Asthma often takes a toll on patients' mental health. Studies included in this review indicate that yoga can positively influence psychological parameters in individuals with asthma. Participants in yoga groups reported reduced stress levels, improved mental clarity, and increased confidence and motivation to manage their condition (1). The practice of yoga, including pranayama (breathing exercises), has been shown to calm the mind, reduce emotional stress, anxiety, and depression, contributing to improved mental well-being (3). One study emphasized that a change in mindset, including increased self-efficacy and understanding of yoga's benefits, further contributed to improved mental health outcomes (1).

Effect of Yoga on Quality of Life:

Quality of life (QoL) is a crucial outcome measure in chronic conditions like asthma. Several studies in this review assessed the effect of yoga on QoL in asthma patients. The findings consistently demonstrate that yoga interventions lead to significant improvements in various domains of QoL, including physical activity, symptom control, emotional well-being, and social connectedness (1, 2, 4). Participants in yoga groups reported improved overall QoL compared to control groups (2, 4). One study highlighted the feasibility and acceptability of a 16-week yoga and mindfulness program for individuals with severe asthma, demonstrating its positive impact on health-related QoL (1). Yoga's ability to improve respiratory function, reduce symptoms, and enhance mental well-being collectively contributes to the observed improvements in overall quality of life.

Discussion:

The studies reviewed here provide compelling evidence for the benefits of yoga as an adjunct therapy in the management of asthma. Yoga interventions, encompassing physical postures, breathing exercises (pranayama), and mindfulness practices, appear to positively influence physiological parameters, psychological well-being, and quality of life in individuals with asthma. The improvements observed in respiratory function can be attributed to yoga's impact on lung mechanics and respiratory muscle strength. The positive effects on mental health likely stem from yoga's stress-reducing properties and its ability to promote relaxation and emotional regulation. The combined improvements in physiological and psychological functioning contribute to the enhanced quality of life reported by asthma patients practicing yoga.

Conclusion:

This narrative review suggests that yoga is a promising complementary approach for individuals with asthma. The evidence indicates that yoga can lead to improvements in respiratory function, symptom control, mental well-being, and overall quality of life. While further research, including larger and more rigorous randomized controlled trials, is warranted to confirm these findings and explore the optimal yoga protocols for asthma management, the existing evidence supports the integration of yoga into comprehensive asthma care plans. Yoga, as a holistic practice, offers a safe and accessible way for individuals with asthma to actively participate in managing their condition and improving their overall well-being.

References

1. Hiles SA, Urroz PD, Gibson PG, Bogdanovs A, McDonald VM. A feasibility randomised controlled trial of Novel Activity Management in severe ASthma-Tailored Exercise (NAMASTE): yoga and mindfulness. BMC pulmonary medicine. 2021 Dec;21:1-8.

2. Turan GB, Tan M. The effect of yoga on respiratory functions, symptom control and life quality of asthma patients: A randomized controlled study. Complementary therapies in clinical practice. 2020 Feb 1;38:101070.

Journal of Chemical Health Risks

www.jchr.org

JCHR (2025) 15(3), 1472-1474 | ISSN:2251-6727

3. Yadav P, Jain PK, Sharma BS, Sharma M. Yoga therapy as an adjuvant in management of asthma. The Indian Journal of Pediatrics. 2021 Nov 1:1-8.

4. Sodhi C, Singh S, Bery A. Assessment of the quality of life in patients with bronchial asthma, before and after yoga: a randomised trial.

5. Özer Z, Turan GB, Aksoy M. The effects of yoga on dyspnea, sleep and fatigue in chronic respiratory diseases. Complementary therapies in clinical practice. 2021 May 1;43:101306.

6. Balakrishnan R, Nanjundaiah RM, Manjunath NK. Voluntarily induced vomiting–A yoga technique to enhance pulmonary functions in healthy humans. Journal of Ayurveda and integrative medicine. 2018 Jul 1;9(3):213-6.

7. Yüce GE, Taşcı S. Effect of pranayama breathing technique on asthma control, pulmonary function, and quality of life: A single-blind, randomized, controlled trial. Complementary Therapies in Clinical Practice. 2020 Feb 1;38:101081.