



EFFECT OF SPECIFIC YOGA PROTOCOL ON OVERALL HEALTH AND WELL-BEING IN PANDEMIC COVID-19: A LITERATURE REVIEW

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Abstract

In today scenario Covid-19 diseases become the world wide pandemic because this disease spread human to human. Firstly a case of pneumonia has been reported in December, 2019, from the Wuhan city of China with a new type of pathogen. After that WHO named this virus as Novel Corona virus (Covid-19) and declared health emergency on 31 January 2020. This virus gives an adverse effect on human body, as well some body parts; like throat, lungs kidney and heart are mainly affected. In the situation of Covid-19 the yoga becomes a panacea to boost human immunity in pandemic over all worldwide. Pranayama improve naturally breathing process by deep inhalation and exhalation. Some particular asana are beneficial in sheath of all human body as results in strong immunity. The aim of this work is to provide a detailed review of the individual and particular yoga and breathing practice effect on the human life in the situation of pandemic. Particular focus is given on effects of breathing capacity or lung capacity of yoga therapy during Covid-19. This paper simply presents an idea to promote the new elaboration that may also put-on a vision for new researcher.

Keyword: Covid-19, Yoga-therapy, Asana, Pranayama, Ayurveda and Naturopathy

Introduction

Coronavirus (Covid-19): In December 2019, named coronavirus disease was emerged in Wuhan city of china which causing a severe acute respiratory disease with widespread and rapid infectiousness (Zu et al. 2021). Because of outbreak of coronavirus the World Health Organization (WHO) was declared a public health emergency of international concern on 31 January 2020 and named this virus as coronavirus disease 2019 or COVID-19 but the international Committee on taxonomy of virus renamed this virus as severe acute respiratory syndrome- coronavirus 2 (SARS-CoV2) was given on 11 February 2020. With a diameter of 60 to 140 nm β genus coronavirus has wrapped positive-strand RNA virus (Liu J. and Liu S. 2020, Chang et al. 2021). New strains of coronavirus are enter in human cell and affect to the respiratory tract, GI tract, genitourinary tract and heart which cause disease which is an angiotensin-converting enzyme II receptors (Gouveia C. and Campos L. 2020).

Yoga: In the Bhagwat Gita, Yoga is mentioned as Krishna the yoga avatara he teaches yoga to vivasvan a form of solar deity like Hiranyagarbha, who in turn taught to Manu, who was also the original teacher of veda.

Bhagavad gita (4.1):

“श्रीभगवानुवाच |
इमं विवस्वते योगं प्रोक्तवानहमव्ययम् |
विवस्वान्मनवे प्राह मनुरिक्ष्वाकवेऽब्रवीत् ||”

Bhagavad Gita (2.48):

“योगस्थः कुरु कर्माणि सङ्गं त्यक्त्वा धनञ्जय
सिद्ध्यसिद्ध्योः समो भूत्वा समत्वं योग उच्यते”

“Perform action of Dhananjaya, abandoning attachment, being steadfast in Yoga, and balanced in success and failure. Evenness of mind is called Yoga”

Bhagavad Gita (2.50):

“योगः कर्मसु कौशलम्”

“Yoga is dexterity in action; skill is achieved by maintaining evenness of mind while performing the action.”

Yoga Vasistha (3.9.32):

“मनः प्रसमनोपायः योग इत्यभिधीयते”

“Yoga is a skillful trick to calm down the mind”

Patanjali yoga sutra (1.2)

“योगश्चित्तवृत्तिनिरोधः” ||

“Yoga is to gain mastery over the mind”

हठस्य परथमाङ्गत्वादासनं पूर्वमुच्यते |

कुर्यात्तादासनं सथैर्यमारोग्यं छाङ्ग-लाघवम् || Hathpardipika 1/17

Being the first accessory of Haṭha Yoga, asana is described first. It should be practised for gaining steady posture, health and lightness of body.

Yoga Asana and Naturopathy during Covid-19:

Yoga asana, pranayama and naturopathy are effective among all Covid-19 patients in all different age categories and for different seekers from diseases. The combination of yoga (asana, pranayama, meditation & kriya) hydrotherapy, aromatherapy, and self-acupressure and sun bath was an effective technique to improving the physical and mental health along with their immunity. This model is equally effective for better care and management of covid-19 pandemic and significant reduction of anxiety and depression level as well among the covid-19 patients by yoga and naturopathy (Prabu et al. 2021). The effect on anxiety and depression in Covid-19 of yoga and naturopathy intervention with hospital anxiety depression scale (HADS) and Corona anxiety scale (CAS) on 130 covid-19 positive patients whom gave a yoga and naturopathy intervention for 60 min in a day for two week. The significant reduction after gave intervention in scale was the HADS – anxiety $P < 0.01$, HADS-depression $P < 0.01$ and CAS $-P < 0.01$; there was improving physical and mental health in compare of conventional care for Covid-19 positive patients (Jerrin et al. 2021). The integrative therapy of Yoga and Ayurveda was useful in treating of high risk of Covid-19 with mild to moderate symptoms. The patient was recovered from symptoms and has a sense of overall well-being after the approach integrated therapy (Mishra et al. 2021). Ayurveda intervention (Agastya Haritaki and Ashwagandha tablet) to the Covid -19 patients as the protocol based on management of Covid-19 published by Ministry of Ayush, Government of India was gave two session of yoga for 90 days. This intervention helped in manages of pulmonary function and HRCT (high resolution computed tomography) test and change in quality of life during Covid-19/SARS-Cov-2 (Yadav et al. 2021). Yoga intervention was effective as therapeutic in treated of depression, immunity, wellbeing and other health issues during the covid-19. For boosting immunity in the era of covid-19 yoga practice was beneficial to deceased comorbid condition such as diabetes and hypertension (Hembram B. 2021). Yoga practices which described in Ayurveda literature was beneficial in improve immunity and can be used as the preventive therapy for Covid-19. Some yoga practices/exercises like pranayama, Bhujangasana, Matyasana, Adho Mukha Svanasana, Uttanasana and Dhanurasana were immune modulator for health and healing of the body for everyone without age limit in Covid-19 pandemic (Patange A. and Sawarkar P. 2020). Regular use of yoga of immortal intervention (YOI) for 8 week had a significant reduction in symptoms of depression, insomnia and anxiety during the covid-19 pandemic. YOI was played an important role in improving overall mental health in the situation of pandemic. Result showed that depression and anxiety were decreased in PHQ-8 score by 50%, GAD-7 scores decreased by 40-50% and ISI score decreased by 50% on average. These change was found significantly greater ($p < 0.05$) than observed (Verma et al. 2021). Yoga of immortals intervention was the effective in treated of insomnia during the COVID-19 pandemic. Yoga immortal intervention was showed a significant improvement in score of insomnia severity index (ISI) ($p < 0.0001$) in all categories of insomnia i.e. mild, moderate and sub threshold among all age group and in both gender in a situation of Covid-19 pandemic. These app based yoga immortal intervention was performed in world's 14 countries for saw the effectiveness of this in treated of all categories of insomnia (Tunuguntla et al. 2021). Yoga was beneficial in daily routine of life during the Covid-19 to cope up physical, mental, healthy lifestyle and stress during lockdown. A Covid-19 Health Assessment Scale (CHAS) survey was conducted among the yoga and non-yoga group to shown positive change in body functioning of hypothalamic-pituitary-adrenal system, improving immunity by increasing in CD4, heart rate, cholesterol and lipoprotein level. In yoga group there was less health related issues, have a good physical strength and endurance with cope up resources of anxiety and stress during the Covid-19 lockdown (Nagarathna et al. 2021).

Breathing Techniques or Pranayama during Covid-19

In yogic literature various techniques of pranayama are describes but in which some breathing techniques or pranayama are vastly advantageous for human health issues arise during Covid-19. There was therapeutic measure of improving in immunity and mental health by practicing of yogic breathing techniques such as Simha kriya and Isha kriya. In management of psychological stress, respiratory function, immunity, inflammation during the outbreak of Covid-19 these breathing techniques were act as a tool to manage mild and moderate case. As result showed that there was increase in lung capacity, improved oxygen saturation, CD4/CD8improve, pro-inflammatory cytokines reduces and psychological stress decrease (Rain et al.

2021). Sudarshan Kriya Yoga (SKY) and Health Enhancement Program (HEP) online version of these two modules was given to 60 participants for 30 minutes for 4 weeks to find the improvement in self-rated measure of insomnia, anxiety, depression, and resilience in the managing staff during Covid-19 (Lai et al. 2020). There was 92 participants to measure the depression, anxiety and stress scale during the Covid-19 pandemic for 40 days. Author found that the Sudarshan Kriya Yoga have an adverse effect on wellbeing of Health care providers during Covid-19, there was positive impact of SKY breathing techniques on reducing of stress, anxiety, depression during Covid-19 pandemic in HCPs. The result showed significant reduction stress, anxiety and stress scale-2I ($p < 0.001$), Pittsburgh sleep quality index increased from 36.9% to 54.3% after the intervention, Connor-Davidson resilience scale was significantly increase on day 40 ($p = 0.015$) and satisfaction with life scale was increase on day 40 ($p < 0.001$) (Divya et al. 2020). The techniques of pranayama and some yoga practice to overcome stress and anxiety related to pandemic. Pranayama practices which were describe in this article i.e. nadhi sodhan or anuloma viloma, kapalabhati, ujjayi and sitali for 30 minutes every day have a significant effect in physical and mental health for wellbeing among the public during the Covid-19 pandemic. Sukumaran et al. (2020)

Conclusion

Yogic intervention i.e. pranayama, asana and specific breathing techniques are an efficient process in a scenario of today life after a Covid-19 breakdowns and in situation of many other health issues have been reviewed. On the basis of above literature review, it is established that the tentative analysis of yogic intervention having specific breathing techniques also extends to the lung capacity and overall health benefits during the covid-19. This review shows that still here are conflicts, so the systematic experimental study of improving breathing capacity in yoga during the covid-19 is required. Many factors are required to be improved before a primary case study for the yogic intervention in pandemic situation for the overall health of human being. To predict the lung capacity or breathing capacity for wellbeing some standard analysis are required also.

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