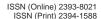
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# ROLE OF YOGA IN PREVENTING CORONAVIRUS DISEASE (COVID-19)

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**Abstract:** There is no specific treatment of newly detected coronavirus available in the world but the risk of coronavirus disease may be reduce through enhancing the immunity system of the body. Coronavirus disease (COVID-19) is a more serious and fatal disease caused by a coronavirus discovered in the year 2019 in Wuhan. Coronavirus is a mild to severe respiratory illness and more five lakhs people lost their life around the world. Yoga is an ancient Indian practice that has been utilized in several ways, for several reasons, between many groups of people for centuries. Yoga has multiple physical, mental and spiritual benefits and holds that the influence of the mind on body is far more powerful than the influence of body on mind.

**Key words:** Immunity, Yoga practice, virus, Severity, immunity, disease

#### INTRODUCTION

Coronavirus disease (COVID-19) is an infectious disease caused by a newly detected coronavirus (WHO 2020). "Corona", in Latin, means crown. The virus is adorned with an outer layer of protein covered in spikes, like a crown. These spikes help the virus attach itself to target cells (Stamataki, 2020). The coronavirus is an ongoing pandemic disease, 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The first work of a virus that enters our bodies is to invade target cells so that it can comfortably remove its coat and deploy its RNA(Stamataki, 2020). This Disease identified in Wuhan, China, in December 2019 (Who 2020). The World Health Organization declared and recognised coronavirus as a pandemic on 11 March of 2020. The virus is primarily spread between people during close contact through coughing, sneezing, or talking (Reich, 2020; Loh et. al. 2020). People may also become infected by touching a contaminated surface and then touching their eyes, nose, or mouth (Coronavirus Disease 2019 (COVID-19)—Transmission). Symptoms of COVID-19 can be relatively nonspecific and infected people may be asymptomatic. The two most common symptoms are fever (88 per cent) and dry cough (68 per cent). Less common symptoms include fatigue, respiratory sputum production (phlegm), loss of the sense of smell (initially estimated at 30 per centbut later at only 15 per cent( Coronavirus Disease 2019 (COVID-19)—Symptoms), shortness of breath, muscle and joint pain, sore throat, headache, chills, vomiting, hemoptysis, and diarrhea(Hopkins 2020) At this time, there are no specific vaccines or treatments for COVID-19 but healthy immune system is usually able to eliminate infection in a couple of weeks(Stamataki, 2020).

## Immunity system and coronavirus -19

The **immune system** is a host defence system comprising many biological structures and processes within an organism that protects against disease (Wikipedia). The Covid-19 has attract the world's towards in importance of immune system, the body's defence force against disease-causing bacteria, viruses and other organisms that we touch, ingest and inhale every day (Stamataki,2020). A healthy lifestyle – avoid smoking and drinking sound sleep, intake a balanced diet, taking regular practice of Yoga (Asana, Pranayama and meditation) are reducing stress and helps our immune systems to be in the strong shape to manage pathogens. Covit-19 is a new virus that has never infected humans before. Humans have poor immunity against it, so the virus spreads rapidly.

#### Yoga and immunity system

Yoga is a way of life that includes the practice of specific postures, regulated breathing and meditation. It is designed to bring balance and health to the physical, spiritual, emotional, mental, and dimensions of the students. Yoga has multiple physical, mental and spiritual benefits and holds that the influence of the mind on body is far more powerful than the influence of body on mind. Yoga helps in gentle and automatic massaging of internal organs and thus helps in enhancing functioning of nervous system, and endocrine system, (Khalsa, et.al 2012). Less amount of sleep (less than six hours), intake of poor nutrition diet, and stress, anxiety, depression, sedentary life style, life style diseases, all lead to a weakened immune system and vulnerability to sickness. Stress and anxiety, more than anything, leads to a breakdown in the body's ability to defend itself against viruses. When stressed, the hormone cortisol stays in the blood for extended periods of time, which the body develops resistance to, leading to increased inflammation. According to Psychology

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Today. A new research published in the Journal of Behavioral Medicine suggests that yoga may be help to boost human's immune system and decrease inflammation in the body. Yoga is one of the most effective and naturally immunity boosters that can lead to a physical and mentally fit, illness-free body and healthy body system. Regular practice of yoga (Asana, Pranayama and Meditation) overcome the stress hormones (Cortisol) and strengthens the nervous system while also stimulating the lymphatic system, which removes toxins from the body (Art of Living).

The regular practice of voga stimulate the secretion of Norepinephrine, serotonin and dopamine in brain and contribute to sound sleep, which is attributed for wellness; sleep is one of the most important factors in healing and maintaining a healthy immune system (Art of Living ). In addition, Meditation also reduces the incidence of infectious diseases by destressing the body and mind. The several research indicates that 30 minutes of meditation in a day increases endorphins, decreases cortisol levels, and fosters positive states of mind to promote better health (Pirisi 2017). Colds and flu attack the bronchial passages, it makes sense that conditioning the lungs and maximizing one's breathing capacity through pranayama would build resistance to preying organisms (Kraftsow 1999). Cold and flu infections, asthma, allergies, and other chronic respiratory disorders are contribute to a weakened immune system " due to irregular habits of breathing (Kraftsow 1999)." Kapalabhati (Kind of Pranayama). "increase the resistance of respiratory tract," they advise, while the nasal wash and alternate-nostril breathing (Nadishodhan Pranayama "increase the resistance of sinuses (Monro, Nagarathna and Nagendra 1991). Recent findings from a Penn State University study involving 294 college students support that, those who irrigated daily with saline experienced a significant reduction in colds. A leading medical school in the US has recommended yoga, meditation and controlled breathing to address anxiety issues related to the novel coronavirus that has now spread fast across America. The Harvard Medical School said in its latest health guideline that, yoga, meditation and controlled breathing are "some tried and true ways to relax".the health guideline report published by Harvard Medical School, Anil Sharma, a community organiser who was part of this initiative, noted that "Aasana, Dhyana and Praanayama, could go a long way in mitigating the isolation anxiety that is gripping communities across the United States.

#### CONCLUSIONS

The regular practice of yoga enhance the immunity system and helps to reduce the risk of COVID-19. Yoga also helps to increases endorphins, decreases cortisol levels, and fosters positive states of mind to promote better health Yoga also helps in gentle and automatic massaging of internal organs and thus helps in enhancing functioning of human body system.

### REFERENCES

- [1]. "Coronavirus Disease 2019 (COVID-19)—Transmission" (https://www.cdc.gov/coronavirus/2019-ncov/prepare/transmission.html). Centers for Disease Control and Prevention. 17 March 2020. Retrieved 23 March 2020
- [2]. Coronavirus Disease 2019 (COVID-19)- Groups at Higher Risk for Severe Illness (Content source: National Center for Immunization and Respiratory Diseases (NCIRD), Division of Viral Diseases) Centers for Disease Control and Prevention. April 17, 2020. Retrieved from https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/groups-at-higher-risk.html.
- [3]. Coronavirus Disease 2019 (COVID-19)—Symptoms". Centers for Disease Control and Prevention. 20 March 2020. Retrieved 21 March 2020.
- [4]. Hopkins C. "Loss of sense of smell as marker of COVID-19 infection". Ear, Nose and Throat surgery body of United Kingdom. Retrieved 28 March 2020.
- [5]. Kraftsow. G, . Yoga for Wellness (Penguin Random House, 1999),
- [6]. Loh NW, Tan Y, Taculod J, Gorospe B, Teope AS, Somani J, Tan AY (March 2020). "The impact of high-flow nasal cannula (HFNC) on coughing distance: implications on its use during the novel coronavirus disease outbreak" Retrieved from (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7090637).
- [7]. Monro, R Nagarathna R, and Nagendra H.R., Yoga for Common Ailments.. Fireside, 1991.
- [8]. Pirisi A (2017 Support Your Immune System: Yoga for Wellness APR 5, 2017. Retrieved from https://www.yogajournal.com/lifestyle/support-your-immune-system.
- [9]. Reich A (12 April 2020). "Coronavirus travels 13 feet in the air, new study finds—An earlier study by MIT gave the virus the travel range of 23–37 feet, which the top US infectious disease expert Dr. Anthony Fauci slammed as "misleading" (https://www.jpost.com/international/coronavirus-tra vels-13-feet-in-the-air-new-study-finds-624377). The Jerusalem Post. Retrieved 12 April 2020.

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- [10]. Stamataki, Z. (2020). Here's how your body gains immunity to coronavirus. The Guardian Retrieved from https://www.theguardian.com/commentisfree/2020/apr/10/heres-how-body-gains-immunity-coronavirus
- [11]. WHO | Novel Coronavirus—China" (https://www.who.int/csr/don/12-january-2020-novel-coronavi rus-china/en/). WHO. Retrieved 9 April 2020.
- [12]. WHO Director-General's opening remarks at the media briefing on COVID-19—11 March 2020" (https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-bri efing-on-covid-19---11-march-2020). World Health Organization. 11 March 2020. Retrieved 11 March 2020.
- [13]. Yoga the natural Immunity booster. The Art of living . retrieved from https://www.artofliving.org/in-en/yoga/health-and-wellness/yoga-natural-immunity-booster.