

Protecting the elders from COVID-19 impact-leveraging yoga

The novel coronavirus disease 2019 (COVID-19) is one of the worst pandemics in history, which has already taken the lives of over one lakh forty-five thousand people.^[1] COVID-19 causes respiratory illness like flu with symptoms such as cough, fever, and difficulty in breathing. This frightening disease is caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The ways to keep the infection at bay is by social distancing, avoiding public places, improving self-immunity, and keeping a calm and relaxed mind.^[2]

Mental health is an essential but often overlooked health component during the outbreak of any epidemic or a pandemic like COVID-19. The emotional and psychological response of people plays a key role in shaping up the course of the disease. The maladaptive behaviors arising due to these extreme psychological reactions lead to poor adherence to the COVID-19 protocols laid out by the WHO and local health authorities, including social distancing, self-isolation, or hand hygiene. These maladaptive behaviors not just affect the individuals, but affect the community and country on the whole.

Elderly populations, in particular, are at higher risk during this pandemic attack by COVID-19 due to comorbid conditions like diabetes, hypertension, chronic kidney disease, and other neurological disorders that will further add to the anxiety and depressive symptoms, which compromise immunity of the elderly individuals. Elderly individuals would have reduced respiratory capacity due to age-related structural and functional changes in the respiratory system.^[3] Further, a recent study has demonstrated that elderly individuals are at greater risk of depression and anxiety by social disconnection.^[3]

Yoga is considered as an effective complementary therapy to overcome anxiety, depression, and also improve respiratory functions.^[4] Simple yoga practices such as *tadasana* (tree pose), *ardha chakrasana* (half wheel pose), *katichakrasana* (standing spinal twist pose), *bhujangasana* (cobra pose), *vakrasana* (twist Pose), *artha matsyendrasana* (Half Lord of the Fishes Pose), yogic breathing practices like *nadi shodhana* (alternate nostril breathing), *bhramari pranayama* (humming bee breathing), and simple meditation techniques like breathe awareness would be of great benefit.^[5] These yoga exercises could be disseminated through digital technology to all elderly people to practice at home. Hence promoting yoga during this pandemic like COVID-19 will be beneficial in improving the respiratory function, as well as

reducing the anxiety and depressive symptoms for the elderly and thereby reduce the morbidity and mortality due to COVID-19.

Primary care physicians play a major role in identifying the patients at risk, especially the elderly population who are at higher risk to COVID-19. It is equally important that they consider the importance of mental health in this particular age group. The importance of mental health, the role of yoga in improving mental health, and also yoga practices beneficial in improving mental health has been discussed in brief in this article. Let us all put our hands together and pray that the pandemic comes to an end soon and play our part to help the millions who are at risk.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

**V. Venugopal¹, R. Pamavathi²,
S. T. Venkateswaran¹,
D. Gunasekaran³, K. Maheshkumar⁴**

¹Department of Yoga and ⁴Physiology and Biochemistry, Government Yoga and Naturopathy Medical College and Hospital, ²Department of Physiology, Sri Ramachandra Medical College and Research Institute, Chennai, Tamil Nadu, India, ³Department of Chemical Sciences, School of Natural Sciences, Ariel University, Ariel, Israel

Address for correspondence: Dr. K. Maheshkumar, Department of Physiology and Biochemistry, Assistant Medical officer/Lecturer Grade II, Government Yoga and Naturopathy Medical college and Hospital, Chennai - 600 106, Tamil Nadu, India.

E-mail: doctor.mahesh1985@gmail.com

References

1. WHO: Coronavirus disease 2019 (COVID-19) information dashboard. Available from: <https://covid19.who.int/>. Last updated: 2020/4/19, 3:00pm.
2. Santini ZI, Jose PE, Cornwell EY, Koyanagi A, Nielsen L, Hinrichsen C, *et al*. Social disconnectedness, perceived isolation, and symptoms of depression and anxiety among older Americans (NSHAP): A longitudinal mediation analysis. *Lancet Public Health* 2020;5:e62-70.
3. Zaugg M, Lucchinetti E. Respiratory function in the elderly. *Anesthesiol Clin North Am* 2000;18:47-58, vi.
4. Cramer H, Lauche R, Anheyer D, Pilkington K, de Manincor M, Dobos G, *et al*. Yoga for anxiety: A systematic review and meta-analysis of randomized controlled trials. *Depress Anxiety* 2018;35:830-43.
5. Novaes MM, Palhano-Fontes F, Onias H, Andrade KC,

Lobão-Soares B, Arruda-Sanchez T, *et al.* Effects of yoga respiratory practice (Bhastrika pranayama) on anxiety, affect, and brain functional connectivity and activity: A randomized controlled trial. *Front Psychiatry* 2020;11:467.

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Received: 07-05-2020

Revised: 11-06-2020

Accepted: 12-06-2020

Published: 25-08-2020

Access this article online	
Quick Response Code: 	Website: www.jfmprc.com
	DOI: 10.4103/jfmprc.jfmprc_797_20

How to cite this article: Venugopal V, Pamavathi R, Venkateswaran ST, Gunasekaran D, Maheshkumar K. Protecting the elders from COVID- 19 impact-leveraging yoga. *J Family Med Prim Care* 2020;9:4487-8.

© 2020 Journal of Family Medicine and Primary Care | Published by Wolters Kluwer - Medknow