



## Role of Pranayama, OM Chanting in Pulmonary Prehabilitation

Sukdev Nayak

AIIMS, India

### Abstract:

Prehabilitation improves pulmonary function in patients with chronic obstructive pulmonary disease (COPD) before any major surgical procedures. However, access to pulmonary prehabilitation exercises and programs with sophisticated equipments is not accessible to many specially in developed nations. Besides the logistics of daily hospital visit for this purpose is cumbersome. We tried ancient Indian practice of pranayama (Anulom Bilom & Kapal Bhati) and “OM Chanting” as an alternative to improve pulmonary function. This can be practiced without sophisticated equipment at home and can be monitored online with suitable mobile applications.

**Subjects:** 100 patients with symptomatic, moderate-to-severe COPD, posted for major abdominal surgery were divided randomly into test group (50) and fifty in control group.

**Interventions:** Three months of pranayama plus OM chanting was done by online training and monitored online by trained experts in the control group. The control group watched a video program on spirituality without any chanting or pranayama practice.

**Outcome measures:** The primary outcome was a change in Pulmonary function Test (PFT). The secondary outcomes were changes in serum markers for oxidative stress and systemic inflammation (C-reactive protein (CRP), Interleukin-6). The last outcome measure was dyspnoea and quality of life.

**Results:** The improvement in PFT in the pranayama group and decreased in the control group with a significance( $p = 0.06$ ) in favour of pranayama. Test groups had significant improvements in symptoms and markers of oxidative stress or systemic inflammation ( $p=0.001$ ) There was significant improvement in QOL and degree in dyspnoea in test group. The changes in control group was insignificant. ( $p=0.12$ )

**Conclusion:** This pilot study proved that pranayama and



OM Chanting was associated with improved PFT with COPD. Online training and evaluation were effective in bringing out the change in PFT. This shows that pranayama and OM chanting may have definite clinical benefits for COPD patients with symptoms, however larger clinical studies are needed to confirm this simple and inexpensive method to improve PFT

**Keywords:** COPD; breathing exercises; pranayama; pulmonary prehabilitation; OM chanting

[World Congress on Pulmonology and Respiratory Medicine, November 16, 2020](#)

**Citation:** Sukdev Nayak, Role of Pranayama, OM Chanting in Pulmonary Prehabilitation, World Congress on Pulmonology and Respiratory Medicine, November 16, 2020