

## Importance of chest physiotherapy and breathing exercises for COVID-19

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The world is undergoing tremendous change and curiosity is high as to when normal life will resume. As the situation is changing hour by hour and anxiety levels keep rising, people are keen to shine clarity on the rapidly shifting landscape.

To reduce transmission, stay safe from virus spread and reduce the size of the pandemic peak, building a strong immune system is crucial than ever. Although everyone is at risk of getting affected by the virus, there are two groups of people who are at higher risk. They are older people as ageing is associated with a weaker immune system and people with co-morbidities or chronic illnesses like diabetes, heart disease, chronic respiratory disease, hypertension, cancer.

### Why is Respiratory Fitness Significant?

Cardiorespiratory fitness is strongly associated with a reduced risk of adverse health outcomes like COVID-19 and this should be a vital part of preparedness for the disease. As the pandemic virus mostly affects the lungs, respiratory health becomes even more important.

In the present scenario when the world is grappling to curb the far-reaching spread of novel coronavirus, staying healthy and taking preventive actions are inevitable. With so much negative going around, people are worried, and the situation is taking a toll on their mental health. Here, physiotherapy has a big role to play.

### Physiotherapists Guided Respiratory Intervention

Physiotherapy helps in improving respiratory fitness and physical rehabilitation of patients with COVID-19. It is crucial to reflect upon the significance of physiotherapy in tackling the situation effectively.

Physiotherapy led rehabilitation measures and respiratory interventions help in the cases with copious respiratory secretions. The patients with co-morbidities and increasing age require airway clearance techniques as they show signs of inadequate

airway clearance; assistance in proper positioning; optimisation of oxygenation; active cycle of breathing and use of proper ventilation. There are other techniques to facilitate secretion clearance like assisted or stimulated cough manoeuvres and airway suctioning. Also, if the patient is able to sit upright, it may also help to ventilate lungs. Physiotherapists have an important role in providing mobilisation and rehabilitation interventions to patients with critical illness associated with COVID-19 in order to enable a functional return to home.

In case of acute respiratory distress syndrome (ARDS), physiotherapists have a role in relaxation, early mobilisation and rehabilitation. Proper physiotherapy techniques enhance the chance of quicker cardio-respiratory recovery in critical care.

### Breathing Exercises are Inevitable

Strengthening the immune system or controlling the ability of the virus to develop across the pulmonary tissue is helpful. Breathing exercises including deep breathing exercises and breathing control have been shown to improve respiratory health to battle the impact of viral pneumonia. Additionally, breathing exercises and relaxation also help to control the level of anxiety and improve mental health in the disease situation that the world is witnessing. Breathing exercises help bring fresh air in, flush out bacteria, reduce blood sugar level, control cholesterol, control blood pressure and can improve lung capacity. Also, it helps flush out a lot of strain from the body, leaving you with a relaxed mind. Deep breathing is often suggested for respiratory fitness and can be done multiple times a day on a regular basis.

People with asthma and other respiratory illnesses are often helped by physiotherapists to help open patients' lungs optimally and try and get rid of some of the fluid and inflammatory material. As coronavirus is known to cause inflammation around the alveoli with a possibility to damage them and reduce lung capacity, breathing exercises help significantly in gaining respiratory fitness.

Physiotherapists also have a role in prescribing tailor-made aerobic exercise, both for the patients recovering from viral pneumonia and for the healthy population. With exercises, the respiratory muscles get stronger and helps expand the chest cavity. More capillaries are formed around the alveoli, facilitating more gaseous exchange. This ultimately leads to reduction in fatigue and increased fitness of the individual.

### Summing It All Up

In addition to maintaining respiratory health, there are two key aspects which are considered important. First, following a good and healthy diet i.e. avoiding junk food to strengthen the immune system. Second, a good sleep of 6-8 hours as a fresh body automatically makes the immune system better. As there exists no specific vaccine to combat the disease, let us all stay physically and mentally strong, healthy and fit.

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