

Physical therapy or Physiotherapy in COVID-19

Severe acute respiratory syndrome coronavirus 2 (SARS-cov-2) is a new coronavirus that emerged in 2019 and causes coronavirus disease.

Preliminary reports indicate that chest radiographs may have diagnostic limitations in COVID-19. Lung computed tomography (CT) scan findings often include multiple mottling and ground-glass opacity.

The current mortality rate is 3 to 5%, with new reports of up to 9%, which is in contrast to influenza at around 0.1%. The rates of admission to an intensive care unit (ICU) are approximately 5%. Around 42% of patients admitted to hospital will require oxygen therapy. The health workforce who are working tirelessly in the fight against COVID-19.

The physiotherapist needs to reflect and quickly adapt in order to care for patients with COVID-19. This involves patient **Assessment**, **Goal setting** as well as the **Prescription of Mobility** and **Rehabilitation** treatments. To do this, physiotherapists work as a member of multidisciplinary team.

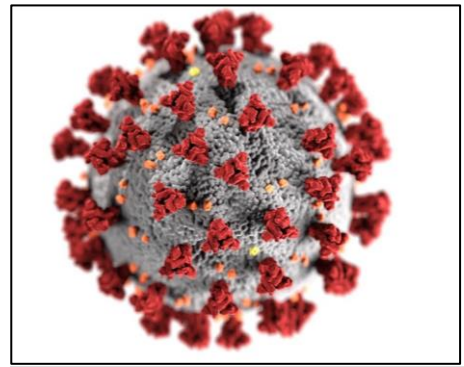


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In primary care (i.e. Private clinics, physician shared or GP practices) the emphasis will be triage and early identification of cases.

In community care (i.e. In the home) the emphasis will be on educating patients and carers.

In acute care (i.e. The hospital setting) the emphasis will be on the management of respiratory symptoms.

Physical Therapists shall make sure to avoid transmission by;

- Personal hygiene
- Wear mask
- Wash hand regularly
- Stay up to date on information
- Following guidelines for Physiotherapy for patients with covid 19

Main interventions/treatment by Physiotherapists;

1. Early rehabilitation and mobilisation

Early rehabilitation and mobilisation involve helping to get patients up and moving. It is important that get patients up and moving and to facilitate their discharge from intensive care and hospital as quickly as possible.

Physiotherapists are responsible for the provision of musculoskeletal/neurological /Cardiopulmonary rehabilitation tasks;

passive, active assisted, active, or resisted joint range of motion exercises to maintain or improve joint integrity and range of motion and muscle strength

Mobilisation and rehabilitation (e.g. Bed mobility, sitting out of bed, sitting balance, sit to stand, walking, tilt table, standing hoists, upper limb or lower limb ergometry, exercise programs).

2. Improving lung function

A further key element of a physiotherapist's role in intensive care is improving a patient's lung function.

As with any patient displaying respiratory symptoms, it may be necessary to provide treatment to relieve symptoms and improve function.

The secretion load of people with COVID-19 is low so they don't usually require invasive or intensive airway clearance techniques.

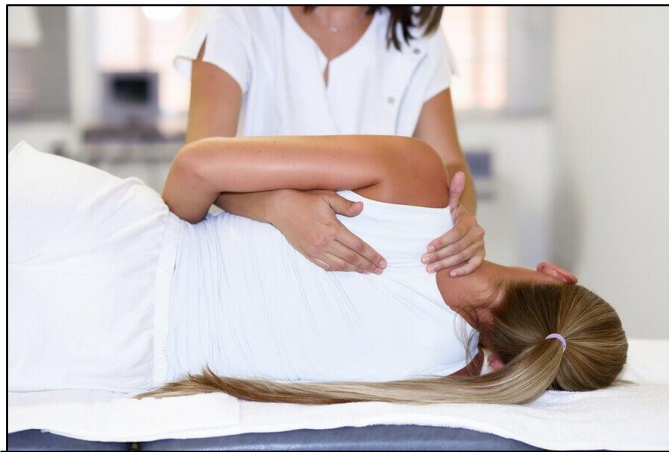


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Physiotherapy support is more focused on non-invasive ventilation support measures and then the rehabilitation phase.

Once stable, if indicated the main goal in respiratory physiotherapy is to mobilise secretions and ease the work of breathing. Interventions may include techniques such as positioning, autogenic drainage, deep breathing exercises, breath

stacking, active cycle of breathing mobilisation and manual techniques (e.g. Percussion, vibrations, assisted cough) to aid sputum expectoration. These interventions can be performed at any stage of the disease where appropriate and safe to perform.

Prone positioning may assist ventilation and closed suctioning is recommended.

3. Contribution to healthcare team

Physiotherapists work in many different settings potentially contribute to reducing the workload of hospitals, the role of the physiotherapist in each setting may differ.

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4. Patient Education

The **patient education** should be done at any patient interaction be it in the clinic, on the phone or via digital consultation. The Health education shall be given to patient in following but not limited to;

Activity - taking into consideration each particular person's individual situation and health condition, provide advice on how to take appropriate activity.

Nutrition - good nutrition is key to boosting immunity.

Sleep - again, sleep is key to keeping a strong immune system. People should be advised to maintain normal sleep patterns and good sleep hygiene.

Mind - the longer people are isolated the more mental health will suffer, particularly for people living on their own. Be sure to offer strategies for good mental health by advising people to keep mentally active with learning and playing, maintain social relationships using online video conferencing tools such as whatsapp and facetime.