



Therapeutic Treatment Analysis of SARS 2

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Purpose The current pandemic SARS 2 has changed the entire world population's physical and mental wellbeing. Flourishing numbers of new research recommends the need for physiotherapy in the management of SARS 2. The purpose of this platform was to review all physiotherapy SARS 2-related studies and to summarize their efficacious highlights.

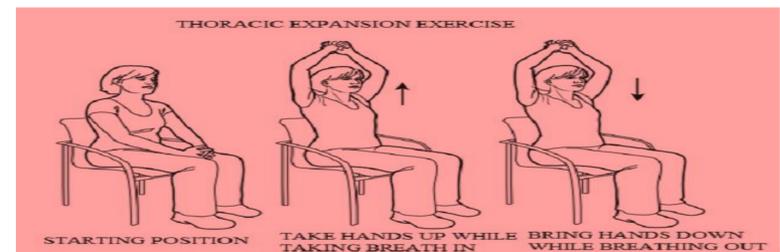
Search Databases: PubMed, PEDro, DOAJ, The Cochrane Database of Systematic Reviews, TRIP database Plus & Google scholar Keywords: "Physiotherapy", "SARS 2", "Coronavirus"

Selection criteria: Studies included physiotherapy intervention as a tool for recovery in SARS 2 Evaluated all full text articles in English from December 2020 to April 2021

Step 1	Step 2	Step 3	Step 4	Step 5
Retrieved 565 articles from above mentioned databases	384 articles excluded at the title and abstract screening	181 articles underwent full-text screening	Further narrowed to 62 studies matching expected criteria	119 studies were excluded for various reasons

- ### Rehabilitation Precautions
- A separate unit or area is suggested for the rehabilitation
 - Patients should stay in their rooms
 - Group therapy and rehabilitation gyms should be prohibited
 - Shared equipment must be decontaminated between patients
 - Single-use equipment should be used (e.g. Thera-Bands rather than hand weights)
 - Attention should be paid to electrode sponges, hydrocollator heat packs, etc.
 - Plan therapeutic activities to minimize the number of personnel involved when possible
 - Single therapist with a gait aid rather than a therapist and an assistant
 - Walking practice should be done in parts of the hospital that are not commonly used

- ### Workforce Planning And Preparation
1. Staff with high risk includes age >60, pregnant, chronic disease, respiratory illness, immune deficiency should not enter the SARS 2 isolation area
 2. Prioritize staff for deployment who have ICU experience
 3. Work different shift patterns (e.g. 12-hour shifts)
 4. Donning, doffing of PPE & enforcing infection control



Clinical Manifestations

- SARS 2 Confirmed
1. Mild symptoms without respiratory compromise
 2. Mild symptoms and/or pneumonia AND co-existing respiratory or neuromuscular

ICU Physiotherapy Care

Unconscious CI, MV	Passive airway clearance, chest percussion, positioning, suctioning, manual hyperinflation
Unconscious CI, not MV	Positioning concerns, airway clearance
Conscious CI, MV	Spontaneous breathing exercise, mobilisation
Unconscious CI, Not MV	Breathing ex, airway clearance techniques, mobilisation



Physiotherapy interventions

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| <h3>Chest physiotherapy techniques</h3> <ol style="list-style-type: none"> 1. Positioning (prone) 2. Deep breathing exercises 3. Postural drainage 4. Percussion, vibration 5. Manual Coughing/huffing | <h3>Mobilisation exercises</h3> <ol style="list-style-type: none"> 1. Passive exercise 2. Active assisted exercise 3. Active exercise 4. Sit out of bed Ambulatory training 5. Functional training |
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- ### Conclusion
1. Early rehabilitation reduces time in ICU, treatment cost since this outbreak brought a significant economic burden to many countries.
 2. People with restricted mobility due to quarantine should receive exercise to reduce the risk of frailty, sarcopenia, cognitive decline and depression.
 3. Tele rehabilitation first choice of treatment.

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1. Thomas P, Baldwin C, Bissett B, Boden I, Gosselink R, Granger. Physiotherapy management for COVID-19 in the acute. JAMA. 2020;323(11):1039-40.
 2. Sheehy LM. Considerations for post acute rehabilitation for survivors of COVID-19. JMIR public health and surveillance. 2020;6(2):e19462.