



ICCrPT – A FOCUS ON COVID-19

Welcome to the International Confederation of Cardiorespiratory Physical Therapists (ICCrPT)

In this edition of our Newsletter the ICCrPT committee would like to focus on the great work that our physiotherapists are undertaking across the world. Physiotherapists are supporting the recovery of patients following COVID-19, working across the spectrum to improve cardiorespiratory health and implementing holistic rehabilitation.

This newsletter contains information about the WCPT COVID-19 resources, COVID-19 related publications relevant to cardiorespiratory physiotherapy and important reflections from physiotherapists working with patients recovering from COVID-19.

In these times it is essential that we support each other. Take care, we wish all our members good health!

Brenda O'Neill PhD, MCSP. President ICCrPT

Please contact the executive committee through our website at info@cardioresp.physio

COVID-19: experiences from a physiotherapist in a hospital ward

A wide range of symptoms and severity of symptoms have been reported in patients with COVID-19 (*e.g. from dry cough, fever, shortness of breath, aches, pains in muscles, sore throat, diarrhea, nausea, runny nose to respiratory failure demanding respiratory support and ICU-care*). It is very important for physiotherapists to be familiar with COVID-19 symptoms and understand how they can be involved in the workforce. Physiotherapists may receive referrals for respiratory and mobility assessment and treatment of patients with COVID-19 admitted to a hospital ward. Most of these patients are medically stable. A patient with COVID-19, who is in a hospital ward, most likely will present with mild respiratory problems. About one third of the patients experience a productive cough and if they have difficulties in mobilising mucus themselves, physiotherapists can teach them the necessary breathing exercises using appropriate personal protective equipment. Those experiencing breathlessness or difficulty breathing can be advised about positioning and relaxed breathing techniques.

Another significant physiotherapy consideration is the mobilisation of this patient. The survivors of COVID-19, who have been discharged from ICU, are reporting that they feel extremely tired, complain of overwhelming muscle soreness and may present with ICU-acquired weakness. Some patients are

objectively weak and are far from their previous level of function, needing further functional rehabilitation. Active and passive movements with their arms, legs and body in the bed may allow the patients to regain function. Standing, walking and sitting exercises outside of the bed help increase their muscle strength, endurance, balance and neuromuscular coordination in order to return home and regain their life roles. In addition, movement and positional changes may cause a considerable drop in oxygen saturation and increased work of breathing alongside a dry persistent cough; treatment may include positional advice, cough etiquette education and breathing control which may reduce their breathlessness following exertion. In addition, the survivors of COVID-19 “feel like that they are isolated from the other world” because their family visit them, and the rehabilitation team was wearing suits, glasses, masks. Therefore many patients also face emotional and psychological problems. In summary, physiotherapists play an important role in patient care during the COVID-19 pandemic from respiratory treatment to active rehabilitation.

Anna Christakou, PT., PhD., General Hospital of Athens “Evangelismos” Athens Greece, Part -time lecturer of Department of Physiotherapy, University of West Attica Athens, Greece, Coordinator of Section of Cardiovascular and Respiratory Physiotherapy-Rehabilitation of Pan-Hellenic Physiotherapists' Association.

Photos below: Anna Christakou performs physiotherapy with a patient with COVID-19.



Interview with a physiotherapist regarding her experience with patients with COVID-19 admitted to the ICU

What is it like to work with patients in the ICU who have been diagnosed with Covid-19?

I work in the ICU with patients diagnosed with Covid-19 on a daily basis. First, I have to say that it is quite warm under all the protective gear we have to wear. So far, the availability of protective gear has been sufficient, but the brands on e.g. respiratory protection (masks) have varied. Some masks are quite difficult to breathe with while others are quite comfortable. All the protective gear also means that you do not recognise your colleagues and that it is difficult to hear what people are saying.

When patients come to the ICU they get intubated (so far we have only had one patient who has not been intubated and could return back to the ward within 24 hours). I have worked for almost 30 years as an ICU physiotherapist and I cannot recall seeing patients present like these patients do. We may think that they are improving, they need less oxygen, they are more stable and then they suddenly deteriorate. It is like they are on a roller coaster. During the initial phase, I have mainly been involved in turning patients into prone position.

When patients finally get better a lot of patients exhibit the same symptoms that we usually see in patients who have been in the ICU for weeks. During this phase I work a lot with mobilisation, passive range of motion, active range of motion,

bed exercises and chest physiotherapy techniques.

So far, I have seen two things that are different with these patients. They are tired, it is like their energy levels are draining very fast when they try to do the very least of physical activity. The other thing is that they seem to present with neurological symptoms that we usually don't see in critical illness.

Maria Sehlin, PhD, RPT, specialist in ICU at University Hospital, Umeå, Sweden.

Resources, Publications and Webinars COVID-19

WCPT has collated information and resources for the physiotherapy members about COVID-19. These can be accessed via this link

<https://www.wcpt.org/node/177917>

Management of Sedation in COVID-19 patients

This webinar offers expert opinion and discussion of all aspects of sedation management and improving outcomes. This webinar is sponsored by Aspen.

https://esicm-tv.org/webinar8_live_29-management-of-sedation-in-covid-19-patients.html

Frontiers: Coronavirus Knowledge Hub A trusted source for the latest science on SARS-CoV-2 and COVID-19

https://coronavirus.frontiersin.org/?utm_campaign=corp-cvlp&utm_medium=f-nlt&utm_source=em

Communication during Crisis: The American College of Cardiology's COVID-19 Information Hub

https://researcheracademy.elsevier.com/workshop/304d628a-2c8b-495f-98e0-8bb619d187c8?utm_campaign=STMJ_111653_

[PUBC_REG&utm_medium=email&utm_dgroup=111653_MAIN_NOAB_SGL_ALL&utm_acid=16798633&SIS_ID=0&dgcid=STMJ_111653_PUBC_REG&CMX_ID=&utm_in=DM676231&utm_source=AC_30&utm_term=111653_PUBC-REG_MAIN_NOAB_SINGLE_ALL](https://www.ersnet.org/covid-19-blog/covid-19-BC-REG_MAIN_NOAB_SINGLE_ALL)

For survivors of severe COVID-19, beating the virus is just the beginning (Sciencemag.org)

<https://www.sciencemag.org/news/2020/04/survivors-severe-covid-19-beating-virus-just-beginning>

The Post-COVID-19 Functional Status (PCFS) Scale: a tool to measure functional status over time after COVID-19

<https://erj.ersjournals.com/content/early/2020/05/12/13993003.01494-2020?cct=2283>

Early Self-Prone in Awake, Non-intubated Patients in the Emergency Department: A Single ED's Experience During the COVID-19 Pandemic.

Capuro et al. *Academic Emergency Medicine*, 2020; 27(95): 375-378

<https://doi.org/10.1111/acem.13994>

<https://onlinelibrary.wiley.com/doi/full/10.1111/acem.13994>

Is the Prone Position Helpful During Spontaneous Breathing in Patients With COVID-19?

Telias et al. *JAMA* May 15, 2020

<https://jamanetwork.com/journals/jama/fullarticle/2766290>

Respiratory parameters in patients with COVID-19 after using noninvasive ventilation in the prone position outside the Intensive Care Unit

Chiara Sartini et al. *JAMA* 15 May 2020

<https://doi.org/10.1001/jama.2020.7861>

Report of an ad-hoc international task force to develop an expert-based opinion on early And short-term rehabilitative interventions (after the acute hospital setting) in COVID-19 Survivors (Version April 3, 2020)

<https://www.ersnet.org/covid-19-blog/covid-19-and-rehabilitation>

Respiratory rehabilitation in elderly patients with COVID-19: A randomized controlled study Liu K. et al. *Complementary Therapies in Clinical Practice* 2020; 39:101166.
<https://doi.org/10.1016/j.ctcp.2020.101166>

COVID-19: Impact on health of people & wealth of nations.
Tandon PN. *Indian J Med Res.* 2020 Feb & Mar; 151(2 & 3):1 21-123.
https://doi.org/10.4103/ijmr.IJMR_664_20

Joint statement on the role of respiratory rehabilitation in the COVID-19 crisis: the Italian position paper.
[Vitacca M et al.,
8 March 2020 on behalf of the Italian Thoracic Society (ITS - AIPO)]
Association for the Rehabilitation of Respiratory Failure (ARIR) and the Italian Respiratory Society (SIP/IRS)
https://www.arirassociazione.org/wp-content/uploads/2020/03/Joint-statement-role-RR_COVID_19_E_Clini.pdf
Respiratory physiotherapy in patients with COVID-19 infection in acute setting: a

Position Paper of the Italian Association of Respiratory Physiotherapists (ARIR)
Lazzeri M et al. *Monaldi Arch Chest Dis.* 2020; 90(1):10.
<https://doi.org/10.4081/monaldi.2020.1285>

Home care for patients with COVID-19 presenting with mild symptoms and management of their contacts Interim guidance 17 March 2020 World Health Organization
[https://www.who.int/publications-detail/home-care-for-patients-with-suspected-novel-coronavirus-\(ncov\)-infection-presenting-with-mild-symptoms-and-management-of-contacts](https://www.who.int/publications-detail/home-care-for-patients-with-suspected-novel-coronavirus-(ncov)-infection-presenting-with-mild-symptoms-and-management-of-contacts)

Rehabilitation considerations during the COVID-19 outbreak
https://www.paho.org/en/documents/rehabilitation-considerations-during-covid-19-outbreak?fbclid=IwAR15dhou9IOU8_z4enF2WAxDgt38LcKJEHHXKH7qUvFRiw95VaZ_WyN8Dk

ICCrPT Research focus

The ICCrPT would like to support research undertaken by our member organisations. For example, we can help you publicise surveys or provide advice.

A current online survey is aiming to examine which ventilation techniques healthcare providers' used to manage adult COVID-19 patients: "Global Current Practices of Mechanical Ventilation Management in COVID-19 Patients". This research is led by Jaber S. Alqahtani with representatives from different countries including the USA, UK, Japan, Chile, Middle Eastern countries, India, Brazil and Australia. If you would like more information or to participate in this research project please email

<mailto:jaber.alqahtani.18@ucl.ac.uk> The survey Link is below:

<https://www.surveymonkey.co.uk/r/COVID-19MV>



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