



February 2021

Welcome to the International Confederation of Cardiorespiratory Physical Therapists (ICCrPT) newsletter: February 2021

Happy New Year with health, joy and happiness!!!



Meet the Current Executive Committee

ICCrPT Executive Committee (2019 to 2023):

President: Brenda O'Neill (United Kingdom)

Vice President: Karin Wadell (Sweden)

Secretary: Shirley Ngai (Hong Kong)

Treasurer: Alison Lupton-Smith (South Africa)

Members (in alphabetical order): Anna Christakou (Greece), Andreas Freund (Germany), Anri Human (South Africa), Kentaro Kamiya (Japan), Tania Larsen (Canada), Harriet Shannon (United Kingdom)

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

The executive committee member highlighted in this edition is

Dr Karin Wadell



Karin Wadell is a Professor in Physiotherapy at Umeå University, Sweden. She is a specialist physiotherapist in respiration at the University Hospital of Northern Sweden and has worked with pulmonary rehabilitation for more than 20 years. Her research area is primarily about methods to improve physical capacity and physical activity in people with chronic obstructive pulmonary disease (COPD). Her interest is now also focused on how different eHealth solutions can be used to improve health. Her research group has, in co-creation with people with COPD and health care professionals, developed an eHealth tool (the COPDweb) to implement knowledge about self-management strategies. Karin has published over 50 scientific articles and book chapters and is passionate about spreading knowledge about evidence-based non-pharmacological treatment for people with COPD.

Upcoming Congresses

National and International Conferences

FEBRUARY

-17th to 19th Online British Thoracic Society Winter Meeting 2021

<https://www.brit-thoracic.org.uk/education-and-events/winter-meeting/>

-25th to 27th Online 25th Annual TB Conference of the Union North American region

<https://events.eplly.com/ENDTBBVIRTUALCONFERENCE20213360489>

MARCH

-25th to 27th Online European Lung Cancer Congress 2021

<https://www.esmo.org/meetings/european-lung-cancer-virtual-congress-2021>

APRIL

-8th to 11th United States Multidisciplinary Update in Pulmonary and Critical Care Medicine

-8th to 10th Online Canadian Respiratory Conference (Canadian Thoracic Society)

<https://cts-sct.ca/crc/>

-9th to 11th Online World Physiotherapy Congress 2021

<https://congress.physio/2021/programme>

-15th to 17th Online The European Congress of Prevention and Rehabilitation, formerly EuroPrevent

<https://www.escardio.org/static-file/Escardio/About%20the%20ESC/Annual-Reports/ESCAnnualReport2020-BD.pdf>

-23rd to 25th Tokyo Japanese Respiratory Society 61st Annual Meeting 2021

<https://www.jrs.or.jp/jrs61/index.html>

-23rd to 24th Online Association of Respiratory Physiotherapists in Respiratory Care (UK) International Conference

<https://www.acprc.org.uk/annual-conference/>

MAY

-1st to 2nd Online Australia and New Zealand Society of Respiratory Science and the Thoracic Society of Australia and New Zealand Annual Meetings

<https://www.tsanzsrs2021.com/>

-4th to 6th Hybrid event The Swedish Lung Congress

<https://mkon.nu/slk2019>

-14th to 19th San Diego (US) American Thoracic Society International Conference

<https://conference.thoracic.org/program/index.php>

JUNE

-2nd to 5th Leipzig 61st Congress of the German Society of Pneumology and Respiratory Medicine

<https://www.pneumologie-kongress.de/>

-18th to 19th Online EuroHeartCare - Annual Congress for Cardiovascular Nursing and Allied Professionals (ACNAP) Congress 2021

<https://www.escardio.org/Congresses-&-Events/EuroHeartCare>

SEPTEMBER

-4th to 8th Barcelona European Respiratory Society 31st Annual Congress 2021

<https://erscongress.org/>



World Physiotherapy Congress2021online

9 – 11 April

WORLD PHYSIOTHERAPY CONGRESS 2021

There is something for everyone at the upcoming World Physiotherapy Congress (9th-11th April). Although the final programme has yet to be released, there are several highlights that may be of interest to cardiorespiratory physiotherapy colleagues. There are also a range of abstracts on topics including cardiorespiratory research, education and clinical practice. All of this from the comfort of your own home!

Focused Symposium

Expanding the role of physiotherapy in global cardiovascular health. Chaired by Julie Redfern (Australia) with speakers including Rufus Adesoji Adedoyin (Nigeria), Lee Nedkoff (Australia), Nicole Lowres (Australia) and Jennifer Jones (UK).

Seminars

Hospital based physiotherapy

Digital health

Networking session

International Confederation of Cardiorespiratory Physical Therapists (ICCrPT).

Chaired by

Brenda O'Neill (President, UK), Shirley Ngai (Secretary, Hong Kong), Harriet Shannon (Member, UK)

Anna Christakou (Member, Greece).

Workshops

Cancer Rehabilitation: implementing evidence into practice

Chaired by Lou James (New Zealand) with speakers including Mandy Tickett (UK)

World Congress 2021 Link

https://congress.physio/2021?_ga=2.110776069.1829358816.1613056632-93184394.1613056625

ICCrPT Member Organization Focus



*In this edition, the ICCrPT focus is on
Cardiopulmonary Specialty Group (CPSG) of
the Hong Kong Physiotherapy Association*

Cardiopulmonary Specialty Group (CPSG), under the auspice of the Hong Kong Physiotherapy Association (HKPA), gathers physiotherapists with a special interest in the cardiopulmonary area. We provide a platform for members to share their clinical experience and expertise as well as exploring new developments in the cardiopulmonary specialty. Being a member of ICCrPT, we are delighted to share and work with physiotherapists worldwide.

Our executive members are active members working in public hospitals and academic institutes who serve to promote professional development and advance the scope of practice in the cardiopulmonary specialty. Currently, the members of our executive committee are:

Role	Name	Workplace
Chairperson	Ms. Joey L. Cheng	Public Hospital
Vice Chairperson	Ms. Jasmine O.Y. Tam	Public Hospital
Treasurer	Ms. Eva Y.W. Chun	Public Hospital
Education Officer	Dr. Shirley P.C. Ngai	Academic Institute
	Ms. Pamela P.W. Chan	Academic Institute
	Ms. Sandy W.C. Leung	Public Hospital
	Ms. Horsanna P.Y. Chiu	Public Hospital
	Ms. Aggie W.S. Kwan	Public Hospital
Public Relation Officer	Mr. Clement K.M. Chan	Public Hospital

Regular clinical sharing and education sessions are organised to advocate evidence-based practice and to facilitate the knowledge transfer not only among physiotherapists, but also other healthcare professions. Other than organising academic activities, we collaborate with local and international organisations to promote physiotherapy practice in the field of cardiopulmonary rehabilitation and actively engage in activities to increase the public's awareness about cardiopulmonary health and fitness in the community. The CPSG continues to promote excellence in cardiopulmonary physiotherapy service and education.

Hong Kong Physiotherapy Association will host the WCPT Asia Western Pacific Regional Congress (AWP) in 2022. We look forward to meeting you in Hong Kong in 2022. <https://www.hongkongpa.com.hk/cardiopulmonary-specialty-group/>



Topical publications in Cardiorespiratory practice

The ICCrPT Knowledge Translation Committee has chosen to highlight the following 2020 publications relevant to Cardiorespiratory Physical Therapy Practice:

Sedentary Behaviors, Physical Inactivity, and Cardiovascular Health: We Better Start Moving!

Physical inactivity and reduced cardiorespiratory fitness (CRF) are major contributors to cardiovascular diseases (CVD). However, a new CVD and all-cause mortality risk factor has emerged in recent years: sedentary behavior (SB). Currently, individuals who increase their SB and reduce their level of physical activity (PA) have a greater risk for cardiovascular diseases, including coronary heart disease, heart failure, and hypertension but also metabolic diseases, such as obesity and type 2 diabetes mellitus. Conversely, those who remain or become physically active and minimize SB, for instance by using standing desks and/or performing quick exercise “snacks,” can reduce the risk for development of cardiovascular and metabolic abnormalities. Moreover, such strategies (ie, increased PA and reduced SB) can also be implemented to improve cardiovascular disease and metabolic risk factors in individuals with established diseases. Of note, the effects of replacing SB with PA are of a greater magnitude than replacing them with standing.

Carbone S. et al. Mayo Clinic Proceedings Innovations Quality & Outcomes December 2020;4(6):627-629

<https://doi.org/10.1016/j.mayocpiqo.2020.09.013>

Manual Massage Therapy for Patients with COPD: A Scoping Review

The use of manual massage in patients with COPD is not supported by substantial evidence in the literature: indeed, it is proposed as a therapeutic option in association with other interventions such as physical exercise.

Polastri M. et al. Medicina 2019;55(5):151
<https://doi.org/10.3390/medicina55050151>

Effectiveness of chest physiotherapy and pulmonary rehabilitation in patients with non-cystic fibrosis bronchiectasis: a narrative review

Respiratory physiotherapy and rehabilitation are important therapeutic options in non-cystic fibrosis bronchiectasis (NCFB). The aims of this review of clinical trials were to evaluate the safety and the effects on physiologic and clinical outcomes of airway clearance techniques (ACTs) and rehabilitation in NCFB patients, in comparison to usual care. The search was performed in March 2018 using PubMed and PEDro databases. 33 studies were selected. The use of ACTs for NCFB was effective in increasing sputum volume although no benefit in quality of life (QoL) or pulmonary exacerbations were observed. There were no differences in effectiveness between the several techniques used. Humidification and saline inhalation were able to aid airway clearance. Hypertonic solution (HS) was more effective than isotonic solutions (IS) in improving expectoration and sputum viscosity. Pulmonary rehabilitation (PR) was found to be associated with short term benefits in exercise capacity, dyspnea and fatigue. Exercise training seems to improve quality of life and lower exacerbation rate, but long-term data are not available. Further studies are necessary to identify the most feasible long-term outcomes such as QoL and exacerbation rate.

Annoni S et al. Monaldi Archives for Chest Disease 2020; 90:1107

<https://doi.org/10.4081/monaldi.2020.1107>

High-flow nasal cannula therapy as apneic oxygenation during endotracheal intubation in critically ill patients in the intensive care unit: a systematic review and meta-analysis.

As an oxygen delivery strategy, high-flow nasal cannula therapy (HFNC) was non inferior to standard of care during apneic oxygenation when initiated at the time of endotracheal intubation. The meta-analysis suggested that HFNC oxygen therapy as apneic oxygenation might be beneficial by lowering the incidence of

severe hypoxemia in patients with mild hypoxemia ($\text{PaO}_2/\text{FiO}_2$ ratio > 200 mmHg). Furthermore, utilizing HFNC during endotracheal intubation might be associated with a shorter ICU stay. Despite these striking findings, there is a need for further research focusing on distinguishing populations that might reap the most benefits from this approach.

Jhou HJ. et al. Scientific Reports 2020;10:3541
<https://doi.org/10.1038/s41598-020-60636-9>

Effectiveness of radiotherapy to prevent recurrence of heterotopic ossification in patients with spinal cord injury and traumatic head injury: a retrospective case-controlled study.

The aim of this study was to evaluate recurrence and early postoperative complications following surgical excision combined with radiotherapy for troublesome hip heterotopic ossification in patients with spinal cord injury and traumatic brain injury. Data from patients in the BANKHO database with spinal cord injury or head injury who underwent surgical excision of hip heterotopic ossification were included. Case patients underwent excision plus radiotherapy and controls only underwent excision. The primary end-point was recurrence. Secondary endpoints were postoperative complications and, more specifically, sepsis that required surgical revision. Data from 19 case patients and 76 controls were analyzed. There was no difference between groups regarding recurrence rate; however, the rate of sepsis requiring surgical revision was higher for patients who received radiotherapy. Based on the results of this study, we suggest that radiotherapy should not be combined with surgery in patients with troublesome hip heterotopic ossification.

Honore T. et al. Rehabilitation Medicine 2020; 52:jrm00066
<https://doi:10.2340/16501977-2692>

Effectiveness of structured early mobilization protocol on mobility status of patients in medical intensive care unit

Patients admitted to the intensive care units (ICU) have limited mobility due to their illness

and its management and are at a risk for immobility-related complications. Early mobilization has been suggested to prevent or limit physical dysfunction due to these complications. Effectiveness of early mobilization protocols is studied using various outcomes. The purpose of the study was to examine the effectiveness of an early mobilization protocol on mobility status of patients in Medical ICU. Patients admitted to Medical ICU were screened for eligibility and allotted into two groups. The intervention group received mobilization according to a protocol while control group received mobilization as per usual mobilization practices in our ICU. Mobility was assessed using the Perme ICU mobility score on the first day of ICU, first day of rehabilitation and last day of rehabilitation. 63 patients were included in the study. The median difference in the Perme ICU mobility score from first day of rehabilitation to last day of rehabilitation was 9 and 2 in the intervention group and control group respectively. Significant improvements in the mobility scores were not present from first day of ICU to first day of rehabilitation in both, the intervention and control groups. Improvements in the scores from first day of rehabilitation were significant within and between both groups. Early Mobilization Protocol was effective in improving mobility status of patients in Medical ICU.

Gatty A. et al. Physiotherapy Theory and Practice 2020
<https://doi:0.1080/09593985.2020.1840683>

Early mobilization in clinical practice: the reliability and feasibility of the ‘Start To Move’ Protocol

The properties of a local Intensive Care Unit early mobilization protocol (‘Start To Move As Soon As Possible’) in critically ill patients, consisting of an objective diagnostic assessment linked to six treatment levels were evaluated. This study aimed to investigate whether the protocol can be reliably applied by different health-care providers (reliability), to examine the associations between prescribed and delivered treatments (feasibility) and to explore safety and patient satisfaction with the protocol.

A cross-sectional observational study evaluating the reliability of the protocol between physiotherapists was evaluated with Cohen's kappa, percentage of agreement, and intraclass correlation coefficients in 61 patients. Feasibility was analyzed as agreement between prescribed and delivered treatments with Spearman's rank correlation coefficients in 60 patients. A satisfaction survey was used to evaluate patient satisfaction with the protocol. Excellent agreement was observed between physiotherapists for diagnostic level assignment, while the majority of the treatment proposals per level showed moderate to substantial agreement between the physiotherapists. Three hundred and thirteen treatments were prescribed. Perfect agreement was observed between prescribed and delivered treatments in level 0 and excellent associations for levels 1–5, respectively. Unwanted safety events rate was 3%. Most patients (92%) were very satisfied with physiotherapy. Excellent inter-rater agreement for diagnostic level assignment and moderate to substantial agreement for proposed treatments supports the reliability of the protocol. Perfect to excellent associations between prescribed and delivered treatments supports its feasibility. Complications were rare, and most patients were very positive regarding the care provided by physiotherapists during their stay in the ICU.

Hoffman M. et al. Physiotherapy Theory and Practice 2020

<https://doi:10.1080/09593985.2020.1805833>

Acceptability, safety, and feasibility of in-bed cycling with critically ill patients

The objective of this study was to examine the acceptability, safety, and feasibility of in-bed cycling in an Australian tertiary, adult, mixed medical, surgical, trauma ICU. An observational

process evaluation was embedded in one arm of a two-arm parallel phase II randomized controlled trial that was conducted in an Australian tertiary ICU. The process evaluation was of the acceptability, safety, and feasibility of passive and active in-bed cycling for participants allocated to the trial intervention group. In-bed cycling acceptability questionnaires were designed through a three step Delphi process. Questionnaire responses from patients, family members, and clinicians who participated in or observed the intervention during the Critical Care Cycling Study (CYCLIST) were evaluated to determine the acceptability of in-bed cycling. The congruence of responses between respondents was also compared. Safety and feasibility of the in-bed cycling intervention were assessed against predetermined criteria. Acceptability questionnaire responses demonstrated that in-bed cycling was an acceptable intervention from the perspectives of patients, family members, and clinicians. Questionnaire responses were congruent across the respondent groups. Safety was demonstrated with two minor transient adverse events occurring during 276 in-bed cycling sessions (adverse event rate: 0.7%). In-bed cycling sessions were feasible with 276 of 304 (90%) planned sessions conducted. Acceptability questionnaire responses found that in-bed cycling was regarded as an acceptable intervention to patients, family members, and clinicians. The implementation of in-bed cycling was safe and feasible to complete with critically ill patients during the early stages of their critical illness in an Australian tertiary ICU setting

Nickels MR. et al. Australian Critical Care 2020; 33(3):236-242

<https://doi.org/10.1016/j.aucc.2020.02.007>

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