



EDITORIAL

Rehabilitative practice in Europe: Roles and competencies of physiotherapists. Are we learning something new from COVID-19 pandemic?



Rehabilitation has been recognised as an essential intervention for the management of at least 25 clinical conditions that are highly prevalent and associated with disability.¹ Estimates have shown that in 2019, 2,41 billion people had conditions that would benefit from rehabilitative treatments.¹ Rehabilitation is part of the universal health coverage to which all individuals should have access, and is it is widely acknowledged that there is an urgently need for it to be disseminated and implemented around the globe.¹⁻³

Physiotherapy promotes maximum functional ability throughout the life span of the general population when movement and function are threatened by ageing, injuries, diseases, and environmental factors.⁴ Physiotherapists, therefore, play a key role in providing appropriate and personalised therapies for those patients needing rehabilitation, and are a well-established professional presence around the world.

Chronic respiratory diseases and/or occurrence of respiratory symptoms such as cough and shortness of breath are already common in those conditions with the highest disability risk and burden.¹

From early 2020, we have known how essential rehabilitative activities are in caring for patients suffering from COVID-19, as clearly outlined by recently issued recommendations.⁵ The demand for rehabilitation services is, therefore, fast increasing globally.¹

To date, 65,000 (100.7/100,000 inhabitants) physiotherapists work in Italy⁶ and approximately 14,000 (140/100,000 inhabitants) in Portugal.⁷ An academic training programme of three (in Italy) or four (in Portugal) years, mainly focusing on the assessment and treatment of musculoskeletal and neurological diseases leads to graduation with a bachelor's degree in physiotherapy. For physiotherapists working in the clinical area of cardiorespiratory disorders and critical care, specific post-graduate programmes of education and training exist aimed at developing advanced skills and knowledge in line with the European Respiratory Society HERMES (Harmonised Education and Training in Respiratory

Medicine for European Specialists).⁸ Although almost 300 physiotherapists have already obtained a post-graduate certificate in this field in Italy, an internal survey conducted by the Associazione Riabilitatori dell'Insufficienza Respiratoria about physiotherapists' engagement during COVID-19 pandemic in the Lombardy Region have highlighted that only 4,7% of responders were skilled in respiratory physiotherapy. The scenario in Portugal is worse, with little more than 1,000 physiotherapists working in the National Health Service, of whom 909 are integrated into hospitals and 150 in primary care.⁹ The exact percentage of physiotherapists specialised in cardiorespiratory field is not available, but in an online survey conducted in 2016 with 375 Portuguese physiotherapists, of 54% possessing a cardiorespiratory post-graduate course, only 15% were working in that field.¹⁰ In 2020, a nationwide web-survey with 551 physiotherapists showed that only 18% were working with COVID-19 patients. These are the figures that constitute an essential although minimal workforce to speed up the recovery of the individual.

There is no doubt that the current global crisis has highlighted even further (1) the need for greater involvement of physiotherapists in the health care systems across all settings; (2) that the perception of physiotherapists as healthcare professionals subordinated to a medical prescription is outdated, and a movement towards greater autonomy is overdue.

Moreover, from the COVID-19 pandemic, we have learned that physiotherapists have had a clear understanding of the procedures and treatments that should be carried out since the beginning of the SARS-CoV-2 outbreak; they were also deeply involved in the genesis of relevant research and have published key documents for proper management of patients with COVID-19.^{11,12} There are several likely explanations for the way these professionals have responded to the needs of the pandemic. Among these, the main ones could be summarised as follows: 1) development of specialised educational programmes, including post-graduate courses, and production of high-quality research has contributed to

<https://doi.org/10.1016/j.pulmoe.2020.12.014>

2531-0437/© 2021 Sociedade Portuguesa de Pneumologia. Published by Elsevier España, S.L.U. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

expanding the borders of physiotherapy knowledge in the last 20 years; 2) overall, in the developed countries, physiotherapists are recognised as autonomous professionals and are responsible for planning and implementing therapeutic procedures in different types of clinical conditions and in heterogeneous care settings; 3) hierarchical relationships between healthcare professions (*i.e.*, physiatrists and physiotherapists) are today only anecdotal.

Sharing evaluations of patients with acute or chronic conditions among different healthcare professionals is fundamental to optimise outcomes across all clinical settings. Pulmonologists, anaesthetists, surgeons, general practitioners and nurses, among others, often deal with physiotherapists directly. This two-way collaboration is essential for addressing the new and urgent challenges such as the critical care of patients with COVID-19.^{13,14} Such collaboration will also be crucial in the future demand for rehabilitation.¹

Therefore, there is an urgent need to raise academic and public awareness of physiotherapy and its different areas of action and settings of work. A special emphasis should also be given to increased awareness of cardiorespiratory physiotherapy in light of the current challenges being faced (*i.e.* increasing number of lifestyle-related conditions, ageing of the population, still unpredictable sequelae of COVID-19).

The recent experience with the pandemic has taught all of us that interdisciplinary teams, in which all members are equally recognized, are strategic structures for addressing such an unprecedented situation. Recognising physiotherapists as autonomous professionals, with the freedom to exercise their professional judgement and decision making, within their knowledge, competence and scope of practice, is crucial for optimisation of patients' rehabilitative outcomes.

Consent to publish data

Not applicable

Funding

The authors declare that no funding was received for this paper.

Conflicts of interest

The authors have no conflicts of interest to declare.

Acknowledgments

We want to thank Professional Editor Colin Woodham for language editing.

References

- Cieza A, Causey K, Kamenov K, Hanson SW, Chatterji S, Vos T. Global estimates of the need for rehabilitation based on the Global Burden of Disease study 2019: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet*. 2020;S0140-6736(20), 32340-0.
- Wade DT. What is rehabilitation? An empirical investigation leading to an evidence-based description. *Clin Rehabil*. 2020;34(5):571–83.
- World Health Organization. WHO global disability action plan 2014-2021. <https://www.who.int/disabilities/actionplan/en/> (Accessed 21 December 2020).
- World Confederation of Physical Therapy. <https://world.physio/sites/default/files/2020-07/PS-2019-Description-of-physical-therapy.pdf>, 2019 (Accessed 21 December 2020).
- Vitacca M, Lazzeri M, Guffanti E, Frigerio P, D'Ambrosio F, Gianola S, et al. Italian suggestions for pulmonary rehabilitation in COVID-19 patients recovering from acute respiratory failure: results of a Delphi process. *Monaldi Arch Chest Dis*. 2020;90(2).
- Eurostat. Healthcare personnel statistics – dentists, pharmacists and physiotherapists. 2016. <https://tinyurl.com/y4n2bcr2> (Accessed 18 December 2020).
- PORDATA. Fisioterapeutas por 100 mil habitantes: Que países têm mais e menos profissionais de fisioterapia por 100.000 residentes? <https://www.pordata.pt/Europa/Fisioterapeutas+por+100+mil+habitantes-1925> (Accessed 21 December 2020).
- Loddenkemper R, Séverin T, Eiselé JL, Haslam PL. HERMES: good reasons for harmonising education and training in respiratory medicine. *Eur Respir J*. 2006;28(3):470–1.
- Instituto Nacional de Estatística. Estatísticas da Saúde-2018. 2020. https://ine.pt/xportal/xmain?xpid=INE&xpgid=ine_publicacoes&PUBLICACOESpub_boui=257793024&PUBLICACOESmodo=2 (Accessed 21 December 2020).
- Marques A, Oliveira A, Machado A, Jácome C, Cruz J, Pinho T, et al. Cardiorespiratory physiotherapy as a career choice: perspective of students and physiotherapists in Portugal. *Physiother Theory Pract*. 2019;35(11):1094–116.
- Lazzeri M, Lanza A, Bellini R, Bellofiore A, Cecchetto S, Colombo A, et al. Respiratory physiotherapy in patients with COVID-19 infection in acute setting: a Position Paper of the Italian Association of Respiratory Physiotherapists (ARIR). *Monaldi Arch Chest Dis*. 2020;90(1).
- Thomas P, Baldwin C, Bissett B, Boden I, Gosselink R, Granger CL, et al. Physiotherapy management for COVID-19 in the acute hospital setting: clinical practice recommendations. *J Physiother*. 2020;66(2):73–82.
- Lee AJY, Chung CLH, Young BE, Ling LM, Ho BCH, Pua SH, et al. Clinical course and physiotherapy intervention in 9 patients with COVID-19. *Physiotherapy*. 2020;109:1–3.
- Li L, Yu P, Yang M, Xie W, Huang L, He C, et al. Physical Therapist Management of COVID-19 in the Intensive Care Unit: The West China Hospital Experience. *Phys Ther*. 2020;5, pzaa198.

Massimiliano Polastri

Department of Continuity of Care and Disability, Physical Medicine and Rehabilitation, St Orsola University Hospital, Bologna, Italy

Marta Lazzeri^{a,b}

^a *Department of Cardiothoracic and Vascular Surgery, ASST Grande Ospedale Metropolitano Niguarda, Milan, Italy*

^b *Associazione Riabilitatori dell'Insufficienza Respiratoria, Spinal Unit, ASST Grande Ospedale Metropolitano Niguarda, Milan, Italy*

Cristina Jácome

CINTESIS – Center for Health Technology and Services Research and Department of Community Medicine, Information and Health Decision Sciences (MEDCIDS), Faculty of Medicine, University of Porto, Porto, Portugal

Michele Vitacca
ICS Maugeri, IRRCs Lumezzane, Brescia, Italy

Stefania Costi
Surgical, Medical and Dental Department of Morphological Sciences Related to Transplants Oncology and Regenerative Medicine CHIMOMO, University of Modena Reggio-Emilia, Modena, Italy

Enrico Clini*
University Hospital of Modena Policlinico, Respiratory Diseases Unit, Department of Medical and Surgical Sciences SMECHIMAI, University of Modena Reggio-Emilia, Modena, Italy

Alda Marques^{a,b}

^a *Lab3R – Respiratory Research and Rehabilitation Laboratory, School of Health Sciences, Portugal*

^b *iBiMED – Institute of Biomedicine, University of Aveiro, Aveiro, Portugal*

* Corresponding author at: Department of Medical and Surgical Sciences SMECHIMAI, University of Modena & Reggio Emilia, Chair of Respiratory Medicine, Director Post-doctoral School in Respiratory Medicine, Azienda Ospedaliera-Universitaria di Modena, Policlinico, Director, Pneumology Unit, Portugal.

E-mail address: enrico.clini@unimore.it (E. Clini).

22 December 2020

Available online 23 January 2021