

Letter to the Editor Regarding “A Prospective Study of Patients with Persistent Symptoms after SARS-CoV-2 Infection Referred to Physical Medicine and Rehabilitation”

Carta ao Editor Sobre o Artigo “Um Estudo Prospectivo de Doentes com Sintomas Persistentes após Infecção por SARS-CoV-2 Referenciados à Medicina Física e Reabilitação”

Keywords: COVID-19; Quality of Life; Portugal; Post-Acute COVID-19 Syndrome

Palavras-chave: COVID-19; Portugal; Qualidade de Vida; Síndrome Pós-COVID-19

Dear Editor,

We read with great interest the article by Romano *et al* that reported the prevalence of persistent COVID-19 symptoms and their effects on health-related quality of life (HR-QoL) in hospitalized patients referred to a Physical Medicine and Rehabilitation unit. Importantly, the authors analyzed the impact of a personalized home exercise rehabilitation program on patients' physical condition and HR-QoL. Given the resurgence of COVID-19 cases² and the scarcity of long-term COVID-19 data from Portuguese centers, we commend the authors for their valuable contribution to this topic and offer some complementary insights from our own research.³

In Romano *et al* work, 74 patients were assessed approximately 54 days after symptom onset and 70% of patients reported long-COVID-19 symptoms.¹ In our study, 157 patients were systematically assessed at three-, six- and nine-months post-hospital discharge.³ Similarly, 66.5% of patients experienced long-COVID-19 symptoms at the three-month mark, with fatigue being the most frequently reported symptom (59.2%).³

Both studies used the EuroQoL-5D questionnaire to assess HR-QoL. Surprisingly, and regardless of disease severity or demographic characteristics, both Romano *et al* study and ours found a negative impact on HR-QoL attributed to long-COVID-19.^{1,3} Our data depicted that 65.8% of patients experienced impairment in at least one EuroQoL-5D domain at the three month-assessment (Fig. 1A).³ In comparison, HR-QoL impairment ranged from 26% in the pain/discomfort to 44% in mobility and anxiety/depression domains in their work.¹ Fernandes *et al* further validated these findings in the Portuguese population, as HR-QoL impairment was reported in about 64% of COVID-19 patients

in a median time of 55 days after ICU discharge.⁴

The clinical relevance of Romano *et al* work becomes evident by demonstrating that a home exercise plan adapted to the patients' functional level was associated with a statistically significant improvement in physical condition, activities of daily living and in every EuroQoL-5D domain in patients reporting a low to moderate HR-QoL impairment during the first assessment.¹ This is especially pertinent considering that we found a persistent decline in HR-QoL over nine months in symptomatic patients, with more than half of patients experiencing ongoing functional impairment (Figs. 1A and B).³ Therefore, improving physical condition through rehabilitation could offer a promising approach for enhancing HR-QoL in these patients.

The persistence of long COVID coupled with its clear association with HR-QoL impairment, underscores the urgency of addressing this public health concern. Both studies highlight the need for comprehensive follow-up protocols for discharged COVID-19 patients.

AUTHOR CONTRIBUTIONS

All authors contributed equally to this manuscript.

PROTECTION OF HUMANS AND ANIMALS

The authors declare that the procedures were followed according to the regulations established by the Clinical Research and Ethics Committee and to the Helsinki Declaration of the World Medical Association updated in 2013.

DATA CONFIDENTIALITY

The authors declare having followed the protocols in use at their working center regarding patients' data publication.

COMPETING INTERESTS

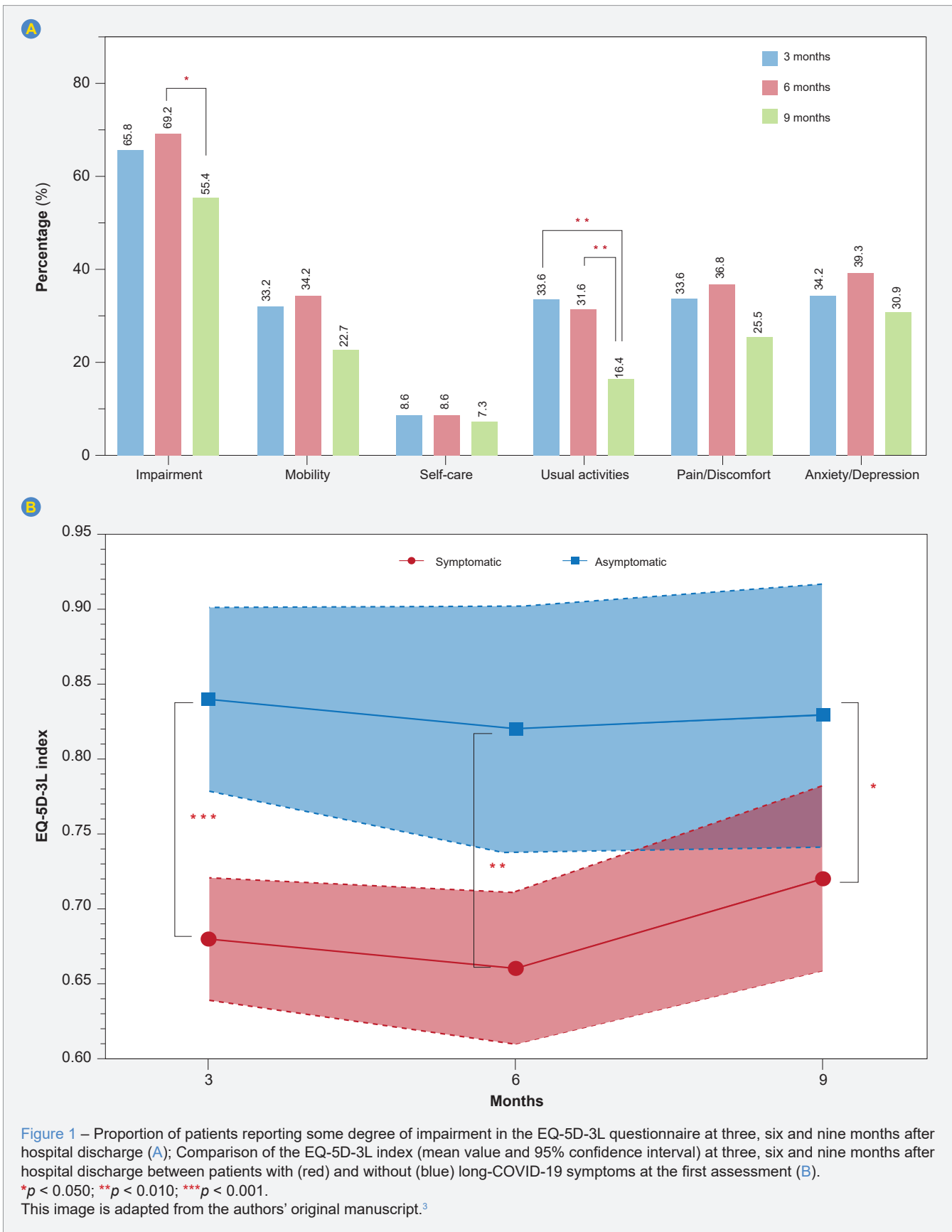
The authors have declared that no competing interests exist.

FUNDING SOURCES

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

REFERENCES

- Romano J, Ribeiro P, Alberto J, Almeida P, Dantas D. A prospective study of patients with persistent symptoms after SARS-CoV-2 infection referred to physical medicine and rehabilitation. *Acta Med Port.* 2023;10:639-46.
- World Health Organization. COVID-19 weekly epidemiological update, edition 155, 10 August 2023. [cited 2023 Oct 12]. Available from: <https://apps.who.int/iris/handle/10665/372267>.
- Gaspar P, Dias M, Parreira I, Gonçalves HD, Parlato F, Maione V, et al. Predictors of long-COVID-19 and its impact on quality of life: longitudinal analysis at 3, 6 and 9 months after discharge from a Portuguese centre. *Acta Med Port.* 2023;10:647-60.
- Fernandes J, Fontes L, Coimbra I, Paiva JA. Health-related quality of life in survivors of severe COVID-19 of a university hospital in Northern Portugal. *Acta Med Port.* 2021;34:601-7.



Mariana DIAS✉¹, Pedro GASPAR^{1,2}

1. Internal Medicine Department. Hospital Santa Maria. Unidade Local de Saúde de Santa Maria. Lisbon. Portugal.

2. Instituto de Medicina Molecular João Lobo Antunes. Faculdade de Medicina. Universidade de Lisboa. Lisbon. Portugal.

✉ **Autor correspondente:** Mariana Dias. dias.mariana@campus.ul.pt

Recebido/Received: 20/08/2023 - **Aceite/Accepted:** 13/12/2023 - **Publicado Online/Published Online:** 14/02/2024 - **Publicado/Published:** 01/03/2024

Copyright © Ordem dos Médicos 2024

<https://doi.org/10.20344/amp.20573>

