Functionality of hospitalized and non-hospitalized individuals with post-COVID-19 syndrome: A cross-sectional study

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Introduction: The number of publications related to COVID-19 is significant, but the literature focused on the post-COVID-19 syndrome is still growing. In 2021, a systematic review and meta-analysis were published, gathering data on the prevalence of post-COVID-19 symptoms, analyzing the differences between hospitalized and non-hospitalized individuals. This meta-analysis revealed that more than 60% of those infected with SARS-CoV2 presented at least one post-COVID-19 symptom after the onset of symptoms or hospital admission, with fatigue and dyspnea being more prevalent. However, this study did not analyze functionality. **Objective:** The objective of this cross-sectional study was to analyze the functionality of hospitalized and non-hospitalized individuals with POST-COVID-19 syndrome. **Material and methods:** This is a cross-sectional study, with data collected from the medical records of patients with post-COVID-19 syndrome treated between September 2021 and September 2022 in the cardiorespiratory rehabilitation sector of the Post-COVID Center (CPC) of the Octávio Mangabeira Specialized Hospital (*HEOM*). A sample of 220 patients was calculated considering a power of 95% and an effect size of 0.5 with 5% significance. The sample calculation was performed using the G*Power 3.1.9.4 software. To present the characteristics of the sample, a descriptive analysis was carried out. The Shapiro-Wilk test was used to test data normality. Parametric variables were presented as mean and standard deviation, non-parametric variables were presented as median and 25%-75% percentiles, and categorical variables were presented as numbers and percentage. The Independent T-test Student was used in comparisons between the two groups when continuous variables were assumed to be parametric, and when non-parametric, the Mann-Whitney U test was used. In comparisons between categorical variables, the Chi-squared distribution and Fischer's exact test were used. All analyses were performed using Jamovi software version 2.3.21. **Results:** Data from 258 patients were analyzed, of which 147 were hospitalized for COVID-19, with a mean age of 52 ± 11.89, and 111 were not hospitalized, with a mean age of 47.1 ± 11.91. No statistically significant differences ($P > 0.05$) were found in the functional tests and questionnaires applied (TSL-30, TUG, FPM, IPAQ, PCFS and mMRC). **Conclusion:** We concluded that no statistically significant differences were found in functionality between the two groups. These results suggest that the impact of COVID-19 on functionality may be homogeneous regardless of individuals' hospitalization.