

NAZIV DISERTACIJE: ZNAČAJ FIZIOTERAPIJE U REHABILITACIJI POST – COVID - 19 PACIJENATA**Autor:** Samira Beqaj**Mentor:** Prof. dr. Amra Mačak Hadžimerović**Datum odbrane:** 13.06.2023.**DOI:** <https://doi.org/10.17532/DD.2023.14>**SAŽETAK**

Uvod: Pacijenti s umjerenim do teškim oblicima COVID-19 mogu razviti posljedice bolesti uključujući zamor, slabost mišića, smanjenu pokretljivost i narušen kvalitet života. Fizioterapija se smatra ključnom u rehabilitaciji pacijenata oboljelih od COVID-19 kojima je potrebna hospitalizacija.

Hipoteze: Funkcionalni kapacitet post-COVID-19 pacijenata nakon sprovedenog programa fizioterapije je značajno viši u odnosu na početak programa fizioterapije. Kvalitet života post-COVID-19 pacijenata nakon sprovedenog programa fizioterapije je značajno bolji u odnosu na početak programa fizioterapije.

Ciljevi istraživanja: Ispitati funkcionalni status post-COVID-19 pacijenata u odnosu na vremenski period nakon hospitalizacije, ispitati kvalitet života post-COVID-19 pacijenata u odnosu na vremenski period nakon hospitalizacije, utvrditi efekat šestonedjeljnog kućnog programa fizioterapije na funkcionalni kapacitet post-COVID-19 pacijenata, utvrditi efekat šestonedjeljnog kućnog programa fizioterapije na kvalitet života post-COVID-19 pacijenata, te na osnovu dobivenih rezultata dati prijedlog smjernica za rad fizioterapeuta s post-COVID-19 pacijentima nakon hospitalizacije

Ispitanici i metode: U studiju su uključeni pacijenti koji su bili hospitalizirani zbog COVID-19 bolesti pri Univerzitetskom Kliničkom Centru Kosova (UKCK) i koji su se javili u specijalističku ambulantu za Fizikalnu medicinu i rehabilitaciju pri UKCK. Funkcionalni kapacitet, u sklopu fizioterapijske procjene, se procjenio putem ispitivanja ograničenja u aktivnostima svakodnevnog života (PSFS), ravnoteže, funkcionalne pokretljivosti i snage mišića donjih ekstremiteta (SPPB), snage stiska šake (ručni dinamometar), zamora i dispneje (Borg CR10), zasićenja krvi kisikom, frekvencije srčanog ritma, krvnog pritiska i aerobnog kapaciteta i izdržljivosti (6MWT). Kvalitet života se utvrdio putem upitnika EQ-5D-5L. Fizioterapijska procjena pacijenata je izvršena dvije sedmice nakon otpusta iz bolnice i pri završetku kućnog fizioterapijskog programa. Fizioterapijski program u trajanju od šest sedmica je uključivao, ovisno o toleranciji pacijenata na napor, respiratorne vježbe, vježbe za relaksaciju, vježbe za poboljšanje aktivnosti u svakodnevnom životu, jačanje snage mišića gornjih i donjih ekstremiteta, te vježbi za poboljšanje balansa.

Rezultati: Nakon sprovedenog fizioterapijskog programa, simptomi prekomjernog umora i dispneje su bili značajno poboljšani. Takođe je utvrđeno znatno povećanje spobnosti u izvršavanju svakodnevnih aktivnosti, značajno bolja funkcionalna pokretljivost, te povišen aerobni kapacitet i izdržljivost.

Zaključak: Iako ograničena odsustvom kontrolne grupe, ova studija je utvrdila značajan efekat kućnog fizioterapijskog programa na poboljšanje simptoma, funkcionalnog kapaciteta i zdravstvenog kvaliteta života post-COVID-19 pacijenata nakon hospitalizacije.

Ključne riječi: COVID-19, fizioterapija, rehabilitacija, funkcionalni kapacitet, zdravstveni kvalitet života.

DISSERTATION TITLE:**Author:** Samira Beqaj**Mentor:** Prof. dr. Amra Maćak Hadžiomerović**Date of defence:** 13. Jun 2023.**DOI:** <https://doi.org/10.17532/DD.2023.14>**SUMMARY**

Introduction: Patients with moderate to severe courses of COVID-19 may develop disease sequelae including fatigue, muscle weakness, reduced mobility, and impaired quality of life. Physiotherapy is considered crucial in the rehabilitation of patients suffering from COVID-19 who require hospitalization.

Hypotheses: The functional capacity of post-COVID-19 patients after the implemented physiotherapy program is significantly improved in comparison to initial assessment. The quality of life of post-COVID-19 patients after the implemented physiotherapy program is significantly improved in comparison to initial assessment.

Research objectives: To examine the functional status of post-COVID-19 patients in relation to the time period after hospitalization, to examine the quality of life of post-COVID-19 patients in relation to the time period after hospitalization, to determine the effect of a six-week home physiotherapy program on the functional capacity of post-COVID-19 patients, to determine the effect of a six-week home physiotherapy program on the quality of life of post-COVID-19 patients, and based on the results, to propose guidelines for physiotherapy treatment of post-COVID-19 patients after hospitalization.

Subjects and methods: The study included patients who were hospitalized due to COVID-19 disease at the University Clinical Center of Kosovo (UCCK) and who reported to the specialized clinic for Physical Medicine and Rehabilitation at the UCCK. Functional capacity, as part of the physiotherapy assessment, was evaluated by examining limitations in activities of daily living (PSFS), balance, functional mobility and muscle strength of the lower extremities (SPPB), hand grip strength (hand dynamometer), fatigue and dyspnea (Borg CR10), blood oxygen saturation, heart rate, blood pressure, as well as aerobic capacity and endurance (6MWT). Quality of life was determined using the EQ-5D-5L questionnaire. Physiotherapy evaluation of the patients was performed two weeks after discharge from the hospital and at the end of the home physiotherapy program. The six-week physiotherapy program, depending on the patient's abilities, included breathing exercises, relaxation exercises, exercises to improve activities in daily life, strengthening of muscles of upper and lower extremities, and exercises for improvement of balance.

Results: After the physiotherapy program, the symptoms of excessive fatigue and dyspnea were significantly improved. A significant increase in ability to perform daily activities, significant improvement in functional mobility, as well as increased aerobic capacity and endurance were also found.

Conclusion: Although limited by the absence of a control group, this study found a significant effect of a home physiotherapy program on improvement of symptoms, functional capacity, and health-related quality of life of post-COVID-19 patients after hospitalization.

Keywords: COVID-19, physiotherapy, rehabilitation, functional capacity, health-related quality of life.