

**Abstract:**

The thesis is concluding theoretical knowledge about fatigue, its originates at patients with multiple sclerosis and also the possible ways of objectivizations of fatigue. There is also description of impact of exercise on fatigue and other benefits for these patients. Moreover, the advantages of the telerehabilitation are described.

In the second part of thesis, we are evaluating results after a 12-week walking programme in the experimental group (16 patients with multiple sclerosis). For testing, the participants filled questionnaires (Fatigue Severity Scale, Modified Fatigue Severity Scale) and did the walking tests 6 Minute Walking Test, Timed 25 Foot Test, Timed Up and Go Test and Six Spot Step Test. Finally, we statistically compared them with the data from the control group. Because of the different numbers of men and women between groups, we provided statistically analysis only in the group of women. Nonetheless, after intervention no significant changes were found and only clinical meaningful change was for Fatigue Severity Scale score.

**Key words:** multiple sclerosis, fatigue, walking, training, telerehabilitation