(S131) EFFECTS OF TRAINING AND EDUCATION IN PEOPLE WITH MULTIPLE SCLEROSIS
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Background: People with multiple sclerosis (MS) exhibit a wide range of symptoms, often including reduced mobility and decreased quality of life. Objectives: The purpose of this study was to evaluate the effects of a 12-week guided wellness program including upper- and lower-extremity resisted strengthening exercises; cardiorespiratory fitness training; and interactive wellness education, including nutrition, sleep hygiene, energy conservation, and stress management. We hypothesized that participation would improve overground gait function, lower-extremity torque production, strength, and quality of life. Methods: The target population consisted of six subjects diagnosed with MS in a stable disease process. The program was offered twice a week for 12 weeks with the guidance of a licensed occupational therapist. The following outcome assessments were completed before and after the 12-week period: Multiple Sclerosis Quality of Life–54 (MS-QOL-54) interview physical (PHC) and mental health (MHC) composite scores, 6-minute and 10-m timed walk, Timed Up and Go (TUG) test, Box & Blocks test (BBT), Expanded Disability Status Scale (EDSS), manual upper-extremity strength testing (MMT), isometric torque measurements, and dynamometer grip strength testing. Results: Five subjects completed the 12-week course. One subject dropped out because of transportation issues after 2 weeks. The program was well tolerated by all subjects and for the majority resulted in improved overground gait function corresponding to improvements in isometric torque production. Changes exceeded the minimal detectable change in the 10-m timed walk (three subjects) and TUG test (one subject). All subjects experienced improved upper-extremity function in at least one hand as measured by the BBT, which did not directly correspond to improvements in grip strength. Improvements in the MS-QOL-54 were demonstrated for both composite scores. No changes were observed in EDSS score. Conclusions: This small pilot study demonstrates that a wellness program for people with MS in a community-based fitness center may be beneficial in maintaining or improving quality of life and overground walking ability. Further studies are needed to discern efficacious dosing and intensity for the disease process.

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