

Effects of Hippotherapy on Postural Stability in Persons with Multiple Sclerosis: A Pilot Study. Silkwood-Sherer, D., Warmbier, H. *Journal of Neurologic Physical Therapy*: JNPT, 31(2) 2007 Jun:77-84.

Abstract: **PURPOSE:** The purpose of this pilot study was to examine the effectiveness of hippotherapy as an intervention for the treatment of postural instability in individuals with multiple sclerosis (MS). **SUBJECTS:** A sample of convenience of 15 individuals with MS (24-72 years) were recruited from support groups and assessed for balance deficits. **METHODS:** This study was a nonequivalent pretest-posttest comparison group design. Nine individuals (4 males, 5 females) received weekly hippotherapy intervention for 14 weeks. The other 6 individuals (2 males, 4 females) served as a comparison group. All participants were assessed with the Berg Balance Scale (BBS) and Tinetti Performance Oriented Mobility Assessment (POMA) at 0, 7, and 14 weeks. **RESULTS:** The group receiving hippotherapy showed statistically significant improvement from pretest (0 week) to posttest (14 week) on the BBS (mean increase 9.15 points ($\chi^2 (2) = 8.82, p = 0.012$)) and POMA scores (mean increase 5.13 ($\chi^2 (2) = 10.38, p = 0.006$)). The comparison group had no significant changes on the BBS (mean increase 0.73 ($\chi^2 (2) = 0.40, p = 0.819$)) or POMA (mean decrease 0.13 ($\chi^2 (2) = 1.41, p = 0.494$)). A statistically significant difference was also found between the groups' final BBS scores (treatment group median = 55.0, comparison group median 41.0), $U = 7, r = -0.49$. **DISCUSSION:** Hippotherapy shows promise for the treatment of balance disorders in persons with MS. Further research is needed to refine protocols and selection criteria.