

## **Abstrakt**

One of the symptoms of MS is impaired function of HK which may be affected by tremor, ataxia, impaired stability of the trunk and other factors. The aim of this study is to determine whether physiotherapy interventions focused on the postural muscle activation and restoring muscle balance in the trunk area has an impact on fine motor skills of upper limb and to demonstrate positive impact of therapy on the quality of life in patients with MS.

Therapy contained elements of Bobath concept, activating motor programs therapy, developmental positions and supports of the upper limbs, but no therapeutic approach primarily focused on improvement of the upper limb function.

In the theoretical part, the author devotes a detailed analysis of the theoretical foundations relating to the disease, symptoms and with the help of the current studies of the possibilities of their therapy.

The practical part describes the methodology of work, tests, and finally on the interpretation of their results. For the evaluation was carried out a total of four tests conducted by a independent physiotherapist. Each of these patients was subjected to a battery of 9 tests and 4 questionnaires, the results of which were carefully recorded.

The results of the study did not demonstrate statistical improvement in upper limb function, but in the case of the less affected upper limb the results suggest a positive improving trend. This fact points to the better adaptability of the moderately impaired hand, that is able to benefit from a less specific therapeutic interventions.

### **Klíčová slova:**

Multiple sclerosis, function of the upper limb, MS therapy, tremor, ataxia, stability