

## **BACHELOR THESIS ABSTRACT**

**Author:** Veronika Knapová

**Supervisor:** Mgr. Klára Novotná, Ph.D.

**Title:** Physiotherapy in people with multiple sclerosis with higher neurological disability

### **Abstract:**

The bachelor thesis deals with the possibilities of physiotherapy in patients with multiple sclerosis (MS) with severe disability focusing on postural and respiratory functions.

The theoretical part gives a comprehensive overview of the problematics of this disease. Great emphasis is placed on the possibilities of rehabilitation care in MS, especially in patients with severe neurological deficit and the importance of the interdisciplinary team. Furthermore, there is a chapter devoted to respiratory physiotherapy and basic terms in the postural system, on which procedures used in a practical part are focused.

In the practical part I focus on the description of case reports of 4 patients with MS with severe neurological deficit according to the Expanded disability status scale 7.0 and more. Each patient underwent 6 individual home therapies. The therapies were focused mainly on influencing respiratory and postural functions. The results of these therapies were objectively evaluated using the following functional tests: Unsupported Sitting Endurance Test, Modified Functional Reach Test and Examination Of the Strength Of Respiratory Muscles Using Maximal Inspiratory And Expiratory Pressures. The results are recorded in diagrams and tables and they are described in detail. I created a non-standardized questionnaire to obtain subjective evaluation from the patients.

Based on the overall results, all 4 patients showed a positive effect of home therapy, especially on postural and respiratory functions. I believe that thanks to this work the importance and great sense of physiotherapy will be shown even in such severely affected patients with multiple sclerosis.

**Key Words:** multiple sclerosis, rehabilitation, physiotherapy, postural system, respiratory system

