

## **ABSTRACT**

**Title of the work:** Children's asthma bronchiale

### **Purpose of the work**

To verify, experimentally, the influence of the exercise treatment and ball facilitation with the peak flow values measured by the peak-flow metre upon children with asthma bronchiale.

To verify, clinically, the influence of the exercise treatment upon the gait of children with asthma bronchiale. Evaluation of the effect of the exercise treatment will be verified by the Klein and Thomas method modified by Mayer.

### **The method**

The work is carried out on the basis of a case study; what is studied is the interaction of each individual with the proposed program. This program should have a positive impact on the state of their health.

The thesis consists of two parts: theoretical and practical. The former is based on an earlier survey, which was elaborated in the bachelor thesis and has recently been extended with further theoretical knowledge.

The practical part was extended with the observation method which is based on the observed values of the peak flow and with the number of the studied individuals. This part is focused on processing the individual cases and methods. For the gait judgement the Klein and Thomas method modified by Mayer was used. Further, the ball facilitation by Jebavá was applied and the posture examination as well as the shortened muscles examination was based on Janda's method. The peak flow measurement was assessed with the peak-flow metre.

### **The outcome**

All of the examined individuals proved improvement in their gait thanks to the exercise treatment. The gait judgement was based on the Klein and Tomas's method. The measurement with the peak-flow metre did not prove any influence of the ball facilitation on the peak flow values.

### **Key words**

asthma bronchiale, respiratory system, lung ventilation, breathing examination, ball facilitation, peak-flow metre.