

## **Abstract**

**Title:** Physical education of individuals with type 2 diabetes mellitus

**Objectives:** The aim of this thesis is to evaluate the effect of physical education of individuals with type 2 diabetes mellitus cured in diabetologic outpatient clinic of General University Hospital in Prague. The physical education was focused on nordic walking.

**Methods:** Eight patients of diabetological outpatient clinic were chosen by the doctor for this survey. The physical examination was carried out with seven patients. It involved anthropometrical measurements (weight, waist circumference) and blood collection for biochemical parameters assessment (glycemia, glycated hemoglobin). Two-minute step test was chosen for assessment of subject's physical fitness.

**Results:** The physical activity education of individuals with type 2 diabetes mellitus doesn't increase the amount of their physical activity. The physical activity of type 2 diabetes mellitus individuals is rather low as well as their exercise adherence. Nordic walking exercise program can improve anthropometrical parameters (weight, waist circumference) and can reduce HbA1c levels. Lower health-related quality of life in physical and physiological aspects wasn't proved in type 2 diabetes patients.

**Key words:** nordic walking, physical activity, type 2 diabetes management, non-pharmacological treatment in type 2 diabetes mellitus, glycated hemoglobin, HbA1c.