

In the present work we compare the effectiveness of therapy in patients with chronic non-specific low back pain (CNLBP) using classical analytical strengthening and strengthening program based on principles of physiotherapy techniques that focus on the stabilization of the spine and are used in the treatment CNLBP.

The experiment included a total of 14 patients diagnosed with CNLBP who were divided into two groups ($n = 7$), each of who underwent a 12-week training either classical or physiotherapy conceived strengthening. As for the evaluated parameters, we chose the size and quality of pain (visual analogue scale and Short Form McGill Pain Questionnaire), restrictions in daily life in relation to LBP (Oswestry Disability Index); we tried to capture a change in the stabilizing muscle function by using a collection of tests according to Kolar (2006). The evaluation took place at the beginning and after the program and then at intervals of six months.

The results showed that there was a statistically significant improvement in both groups in the monitored parameters. The difference in results in pain intensity and functional limitations in life when comparing the two groups showed statistically insignificant. Both the groups of patients improved their score in the evaluation of the stabilizing functions of muscles of the spine; the improvement was comparatively more significant when using the physiotherapy exercise. The dependence of reduction in pain intensity on the modification of muscle HSSP function determined by the correlation coefficient was strongly positive in both groups.

It follows that both types of strengthening training can be recommended in therapy CNLBP, which seems to us preferable to physiotherapy designed workout.