



## The effect of a course of corrective exercises on electromyographic activity of lumbar muscles, functional disability of women with chronic nonspecific low back pain

### Oral Presentation

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### Abstract

**Introduction:** Despite many researches in the field of low back pain treatment, there is still disagreement about the most appropriate treatment method, but there is agreement on the usefulness of active participation methods and exercise therapy in the treatment of chronic low back pain. The aim of this study was to evaluate the effect of a course of corrective exercises on electromyography activity of lumbar muscles, functional disability in women with chronic nonspecific low back pain.

**Methods:** For the study, 20 women with non-specific chronic low back pain were randomly divided into 2 random groups based on inclusion and exclusion criteria, whose low back pain lasted more than 3 months and occurred without specific causes. The exercises were performed for 6 weeks and 5 sessions per week of corrective exercises were performed in the clinic environment. Before and after the training period, pre-test and post-test were performed and muscle electromyography activity was measured by EMG, the degree of functional disability was measured by the Austrian questionnaire. Covariance for pre-test and post-test (with a significance level of 0.5) was used for analysis. For EMG data after recording, this information was transferred to Noraxon MR 3.10.64 software and data analysis was performed.

**Results:** According to the obtained results, corrective training significantly reduces lumbar electromyographic activity (0.000), significantly improves functional disability (0.002).

**Conclusion:** According to the research findings, corrective exercises may improve functional disability by strengthening the lumbar muscles. It can probably be concluded that muscle training and increasing muscle strength can help support spinal muscle breakdown. Finally, by increasing attention to choosing the type of exercises that focus on strengthening the muscles of central stability and back muscles can help improve people with low back pain.

### Keywords

corrective exercises; Electromyography activity; Functional disability; Chronic nonspecific low back pain; Back muscles

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