



## The effects of a core stability based corrective exercise program on improving functional movement patterns in male adults with lumbar hyperlordosis

### Poster Presentation

1Mojtaba Rahmani; 2Shahzad Zandi \* ; 3Hooman Minoonejad

<sup>1</sup>MSc. Corrective exercise and Sports Injuries, Department of Health and Sports Medicine, Faculty of Physical Education and Sport Science, University of Tehran, Tehran, Iran

<sup>2</sup>Assistant Professor, Department of Health and Sports Medicine, Faculty of Physical Education and Sport Sciences, University of Tehran, Tehran, Iran (shzandi@ut.ac.ir)

<sup>3</sup>Associate Professor, Department of Health and Sports Medicine, Faculty of Physical Education and Sport Sciences, University of Tehran, Tehran, Iran

### Abstract

**Introduction:** Based on body chain reactions, the lumbar hyperlordosis may affect the stability, function and performance and may result in injury or pain and lead to postural and movement pattern disorders. Repeating these faulty patterns with the wrong sensory inputs traps the body in a vicious cycle, which will result in further adaptations and more permanent postural disorders. While the core muscle's function is playing an important role in the daily activity, there is no evidence on the investigation of its effects on the functional movement patterns in the presence of other postural disorders. Therefore, the aim of this study was to investigate the effects of a core stability based corrective exercise program on improving functional movement patterns in male adults with lumbar hyperlordosis.

**Methods:** Thirty-four male subjects (age: 18-25 years) with lumbar hyper lordosis were participated in this study and randomly assigned into experimental and control groups. Lumbar lordosis was measured by flexicurve and functional movement patterns was assessed with Functional Movement Screening tests.

**Results:** The results showed that the degree of lumbar lordosis curvature and the total scores of FMS and its subsets in the experimental group were significantly reduced compared to after the pre-test and post-test of the control group.

**Conclusion:** It can be concluded that targeted core stability based corrective exercise program, not only can improve lumbar lordosis curvature, but it can also improve functional movement patterns.

### Keywords

Lumbar hyperlordosis; core stability; functional movements screen

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