



Effect of Pilates mat Exercises versus Motor Control Exercises on nonspecific acutelow back pain patients

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Abstract:This study was to investigate the effectiveness of Pilates mat exercises as compared with Motor Control exercises in treatment of nonspecific acute low back pain. Sixty male and female patients referred from an orthopedic surgeon. Patients were randomly assigned into two equal experimental groups. The first experimental group (A) consisted of 30 patients with a mean age of 25.33 (\pm 3.72) years old, body mass of 70.43 (\pm 3.43) Kg, and height of 166.53 (\pm 1.61) cm; received Pilates mat exercises. The second experimental group (B) consisted of 30 patients with mean age of 25.26 (\pm 3.4) years old, body mass of 69.52 (\pm 2.82) Kg, and height of 166.73 (\pm 1.77) cm; received Motor Control exercises. Treatment was given 3 times per week, each other day, for one month. Patients were evaluated pretreatment and posttreatment for back pain severity, back function, lumbar flexion, extension and side bending range of motions. Patients in both groups showed significant improvement in all measured variables. In between groups difference the first group showed a significant improvement than the second group in lumbar flexion range of motion, and no statistical difference in increasing lumbar extension, however there is clinical difference and high percent of improvement in the favor of the first group. There was no significant difference between both groups in reduction of pain and functional disability. Pilates mat exercises and Motor Control exercises are effective in relieving pain and functional disability. Pilates mat exercises is more effective in increasing the lumbar flexion range of motion. There was no difference between Pilates mat exercises and Motor Control exercises groups in increasing the lumbar extension range of motion; however there was clinical difference and high percent improvement in favor of Pilates mat exercises group.

Keywords:Nonspecific acute low back pain, Pilates mat exercises, Motor Control exercises.