

Effectiveness of Office-Based Occupational Therapy for Office Workers with Low Back Pain: A Public Health Approach

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Abstract : This double-blind, randomized control trial with parallel groups aimed to examine the effectiveness of office-based occupational therapy for office workers with low back pain on the intensity of pain and range of motion. Seventy-two male office workers (age: 20-50 years) with chronic low back pain (more than three months with at least two symptoms of chronic low back pain) satisfied eligibility criteria and agreed to participate in this study. The absence of joint burst following magnetic resonance imaging (MRI) was considered as an important inclusion criterion as well. Subjects were randomly assigned to a control or experimental group. The experimental group received the modified package of exercise-based occupational therapy, which included 11 simple exercise movements (derived from Williams and McKenzie), and the control group just received the conventional therapy, which included their routine physiotherapy sessions. The subjects completed the exercises three times a week for a duration of six weeks. Each exercise session was 10-15 minutes. Pain intensity and range of motion were the primary outcomes and were measured at baseline, 6 weeks, and 12 weeks after the end of the intervention using the numerical rating scale (NRS) and goniometer accordingly. Repeated measure ANOVA was used for analyzing data. The results of this study showed that significant decreases in pain intensity ($p \leq 0.05$) and an increase in range of motion ($p \leq 0.001$) in the experimental group in comparison with the control group after 6 and 12 weeks of intervention (between-group comparisons). In addition, there was a significant decrease in intensity of the pain ($p \leq 0.05$) and an increase ($p \leq 0.001$) in range of motion in the intervention group in comparison with baseline after 6 and 12 weeks (within-group comparison). This showed a positive effect of exercise-based occupational therapy that could potentially be used with low cost among office workers who suffer from low back pain. In addition, it should be noted that the introduced package of exercise training is easy to do, and there is not a need for a specific introduction.

Keywords : public health, office workers, low back pain, occupational therapy

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