



Effect of an 8-Week Physiotherapy Exercise Programme on Neck Pain and Functional Outcomes in Office Workers

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Background and Aim. Neck pain is one of the most common musculoskeletal disorders, particularly among sedentary office workers. Prolonged static posture and low levels of physical activity increase the risk of pain, functional disability, and muscle imbalance. The aim of this study was to evaluate the effect of an 8-week physiotherapy programme on neck pain, functional status, and physical performance in office workers.

Methods. Twenty-six sedentary office workers (mean age 31.0 ± 8.8 years) with neck pain participated in a pre–post intervention study. Participants completed an 8-week physiotherapy programme targeting the neck and shoulder girdle. Outcomes assessed before and after the intervention included cervical range of motion, deep neck flexor endurance, upper trapezius muscle tone, handgrip strength, Neck Disability Index (NDI), and pain intensity (Visual Analogue Scale, VAS). Data were analysed using IBM SPSS Statistics (version 29.0.2.0).

Results. After the 8-week programme, participants demonstrated significant reductions in neck pain from 4 to 1.89 in VAS and NDI from 5.7 to 2.8 ($p < 0.05$). Active cervical range of motion increased, particularly in extension and left rotation, improving by 8.8° and 8.3° , respectively. The remaining cervical movements also improved statistically significantly when comparing the post-intervention results ($p < 0.05$). Deep cervical flexor endurance improved significantly, the mean change after the intervention was $+2.08$ mmHg. Upper trapezius muscle tone decreased significantly on both sides from 16.66 and 16.83 Hz to 15.4 and 15.52 Hz. Changes in handgrip strength were minimal and not statistically significant, only a small positive change was observed: $+0.17$ kg in the dominant hand and $+0.19$ kg in the non-dominant hand.

Conclusions. The results indicate that a targeted physiotherapy exercise programme is effective in reducing neck pain and disability and improving cervical function in sedentary office workers. These findings support the implementation of workplace-based exercise interventions. Future studies should examine long-term effects and determine the optimal exercise protocol.

Keywords: Neck pain; office workers; sedentary behaviour; exercise therapy

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Informed Consent Statement: Informed consent was obtained from all subjects involved in the study. This study was approved by the Ethics Committee of Lithuanian Sports University (No. MNL-KIN (M)-2025-818, dated 03 11 2025). The study was conducted in accordance with the Declaration of Helsinki.



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