

# Efficiency of Somatosensory Training with Vastus Medialis Obliques Strengthening for Pain, Proprioception, and Balance in Working Women with Knee Osteoarthritis

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## Abstract

**Introduction:** Osteoarthrosis is a degenerative joint disease as it is the most common form of disorder of the synovial joint. Early atrophy of the vastus medialis oblique indicates general quadriceps weakness. Impairments of balance are recognized in patients with knee OA. It has been suggested that enhancing sensorimotor function can improve functional performance in patients with knee injury and slow its progression. Sensorimotor training is a special form of proprioceptive and balance exercise designed to manage patients with chronic musculoskeletal pain syndromes. The study aims to evaluate the impact of somatosensory training with VMO strengthening on pain, proprioception, and balance in working women with knee osteoarthritis.

**Methods:** A sample of 10 subjects working with women with knee osteoarthritis was selected through simple random sampling for the study. The participants were recruited from Saveetha Hospital.

**Results:** The subjects underwent the prescribed intervention, and the data collected were analyzed statistically for pre- and post-values of the visual analogue scale and the Berg balance scale. The treatment resulted in a bigger change than would be predicted by chance. The difference is statistically significant ( $P = <0.0001$ ).

**Conclusion:** The present study shows the effectiveness of somatosensory training with VMO strengthening on pain, proprioception, and balance in working women with knee osteoarthritis. The results support the idea that the condition's symptoms have been reduced.