

Comparing the Effects of Muscle Energy Technique Versus Pilates on Pain, Strength and Functional Outcomes Among College Students with Non-Specific Neck Pain

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Abstract

Background/Introduction: Non Specific Neck Pain is characterized by discomfort among college students, approximately 40% students particularly those in healthcare programs complain of nonspecific neck pain that can impact academic performance and well-being. Muscle Energy Technique (MET) a soft tissue manipulation therapy that involves focused muscle contraction and relaxation strategies. Pilates focuses on spinal alignment, flexibility, strength and lowering pain.

Objectives: This study aims to compare the effects of Muscle Energy Technique versus Pilates on Pain, Strength and Functional outcomes among college students with non specific neck pain.

Methodology: 32 physiotherapy students with non-specific neck pain was included in the study based on the inclusion and exclusion criteria Baseline assessments, including Pain Detect Questionnaire scores, Neck Bournemouth Questionnaire, and pressure biofeedback, were conducted before and after the 3-week intervention. Participants

received MET treatment in Group A and Pilates in group B with 3-week intervention having 3 sessions per week.

Results: The MET group had a slightly more significant reduction in pain (-13.51%) compared to the Pilates group (-11.27%), while the Pilates group had a slightly better reduction in the Neck Bournemouth Questionnaire Scores (-48.00%) than the MET group (46.53%).

Conclusion: The results suggest that MET can be feasible treatment strategies for reducing neck pain and improving the strength of deep neck flexors whereas Pilates can improve the functional outcome in students with non-specific neck pain. According to the current study MET is found to be a better treatment outcome for NSNP.

Keywords: Non-specific Neck Pain; MET; Pilates