

Notification NO-532/2023

NOTIFICATION DATE- 14-03-2023

Name: Mosab M H Aldabbas

Under The Supervision of Dr.Zubia Veqar

Thesis Title: Studies on understanding the relationship between chronic neck pain and sleep disturbance: A physiotherapy intervention

Centre for Physiotherapy and Rehabilitation Sciences

KEY WORDS: NECK PAIN, SLEEP, POLYSOMNOGRAPHY, FATIGUE CHRONIC, PAIN,

FINDINGS

A Two-arm, Single blinded, Randomised clinical trial with random allocation was conducted. Thirty male patients with chronic neck pain with sleep disturbance were enrolled in the study. Both the experimental groups received neck strengthening-endurance training of 5 sessions/week for first 2 weeks and 4 sessions/week for the following 5 weeks and IFT on the neck for 15 minutes for the same duration (Group 1). Group 2 also received MFR at the same frequency along with the Group 1 treatment. Primary outcomes were sleep architecture which was assessed by polysomnography and pain intensity as assessed by Numeric Pain Rating Scale. Secondary outcome was subjective sleep quality, assessed by Pittsburgh sleep quality index. Pre -post readings were recorded before and after intervention. Both the groups showed a statistically significant improvement in sleep architecture, specifically stage 1 sleep (95% CI, -4.2 to 1.5) and REM sleep (95% CI, -5.4 to -1.5), and significant reduction in pain.

In Conclusion: Neck exercises with IFT or neck exercises with IFT and MFR of 7 weeks were effective in improving pain intensity, and sleep architecture in terms of increased REM sleep and decreased NREM 1 sleep in patients with chronic neck pain.