

ABSTRAK



SKRIPSI, Oktober 2019
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PERBEDAAN INTERVENSI EXERCISE DAN ULTRASOUND DENGAN TRANSCUTANEOUS ELECTRICAL NERVE STIMULATION DAN ULTRASOUND TERHADAP DISABILITAS AKIBAT MYOGENIC LOW BACK PAIN

Terdiri VI Bab, 96 Halaman, 11 Tabel, 16 Gambar, 5 Skema, 1 Grafik 5 Lampiran

Tujuan: Untuk mengetahui perbedaan *exercise* dan US dengan TENS dan US terhadap penurunan disabilitas akibat *myogenic* LBP. **Metode :** Metode penelitian menggunakan *quasi experiment* dengan teknik *purposive sampling*. 24 sampel *myogenic* LBP dibagi menjadi 2 kelompok masing-masing 12. Desain penelitian yang digunakan adalah *pretest-posttest control group*. Kelompok I diberikan intervensi *exercise* dan US sedangkan kelompok II diberikan intervensi TENS dan US masing-masing selama 4 minggu. Disabilitas pada pinggang akibat *myogenic* LBP diukur menggunakan modified ODI. **Hasil:** Uji normalitas dengan *Shapiro wilk test* didapatkan data berdistribusi normal sedangkan uji homogenitas dengan *Levene's test* didapatkan data bervarian homogen. *Mean* penurunan skor MODI pada kelompok I dan II secara berurutan yaitu $25,83 \pm 10,73$ dan $16,00 \pm 8,22$. *Paired sample t-test* pada uji hipotesis I dan II menunjukkan hasil yang signifikan dimana $p=0,000$. Sedangkan pada uji hipotesis III dengan *independent sample t-test* diperoleh $p\text{-value}= 0,020$. **Kesimpulan:** Terdapat perbedaan intervensi *exercise* dan US dengan TENS dan US. *Exercise* dan US lebih signifikan dalam penurunan tingkat disabilitas akibat *myogenic* LBP.

Kata Kunci: *Exercise*, US, TENS, *myogenic* LBP, Disabilitas

ABSTRACT



Thesis, October 2019
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THE DIFFERENCE OF EXERCISE AND ULTRASOUND WITH TRANSCUTANEOUS ELECTRICAL NERVE STIMULATION AND ULTRASOUND TO REDUCE DISABILITY DUE TO MYOGENIC LOW BACK PAIN

Consist of: 6 Chapters, 96 Pages, 11 Tables, 16 Images, 5 Figures, 1 Graph 5 Appendixes

Objective: To investigate the difference between exercise with US and TENS with US for disability due to myogenic LBP. **Method :** A quasi experiment study with purposive sampling technique and pretest-posttest control group design. 24 samples diagnosed with myogenic LBP divided into two groups. Both groups received 4 weeks intervention: group I received exercise and US while group II received TENS and US. Disability was recorded using modified ODI on the first and the last session of intervention. **Results:** Saphiro Wilk test and Levene's test shows significance results, means data is normal and the variances are equal. Mean difference between MODI pre and post in group I and II are 25.83 ± 10.73 dan 16.00 ± 8.22 respectively. Paired sample t-test in hypothesis I and II results $p=0.000$. Independent sample t-test in hypothesis III results $p=0.020$. **Conclusion:** There is a difference between exercise with US and TENS with US. Exercise with US shows more significantly decrease the disability due to myogenic LBP.

Key words : Exercise, US, TENS, myogenic LBP, Disability