

ABSTRAK



SKRIPSI, Agustus 2023

Almira Zahra

Program studi S-1 Fisioterapi

Fakultas Fisioterapi

Universitas Esa Unggul

PERBEDAAN EFEK ANTARA LOWER LIMB EXERCISE DI AIR DAN DI DARAT TERHADAP PENINGKATAN FUNGSIONAL LUTUT PADA KONDISI OA LUTUT

Terdiri dari VI bab, 84 Halaman, 9 Tabel, 4 Grafik, 2 Skema, 8 Lampiran

Latar Belakang: Osteoarthritis lutut merupakan jenis penyakit OA yang paling banyak ditemukan dibandingkan jenis OA lainnya. Perubahan yang dialami oleh pasien OA lutut akibat OA lutut menyebabkan penurunan fungsional lutut yang signifikan. **Tujuan:** Untuk mengetahui pengaruh yang berbeda antara *Lower Limb Exercise* di air dan di darat terhadap peningkatan fungsional lutut pada pasien OA lutut. **Sampel dan Metode:** Kami melakukan uji coba terkontrol secara acak dengan pasien OA lutut menggunakan teknik purposive sampling, yang dialokasikan secara acak ke dalam kelompok air (n=8) dan kelompok darat (n=8). *Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC)* dinilai pada awal dan minggu ke 2. **Hasil:** Tidak ada perbedaan hasil yang signifikan antara kedua kelompok setelah 2 minggu masa tindak lanjut. Setelah 2 minggu, skor WOMAC membaik pada kedua kelompok. Tidak ada perbedaan antar kelompok yang berbeda secara signifikan antara kelompok hidro dan kelompok berbasis darat (semua $P > 0,683$) **Kesimpulan:** Kedua latihan sama-sama meningkatkan keadaan fungsional lutut. Hidroterapi dan latihan berbasis darat dapat meningkatkan keadaan fungsional lutut pada pasien dengan osteoarthritis lutut

Kata kunci: *Lower Limb Exercise*, Fungsional Lutut, OA Lutut, *Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC)*

ABSTRACT



SKRIPSI, August 2023

Almira Zahra

Undergraduate Program Physiotherapy
Faculty of Physiotherapy
Esa Unggul University

DIFFERENCES IN EFFECTS BETWEEN LOWER LIMB EXERCISE IN WATER AND LAND ON KNEE FUNCTIONSLITY INCREASE IN KNEE OA

Consists of VI chapters, 84 Pages, 9 Tables, 4 Chart, 2 Schematics, 8 Attachments

Background: Knee Osteoarthritis is the most common type of OA disease compared to other types of OA. The changes experienced by patients with knee OA caused by knee OA leads to a significant functional decrease in the knee. **Objective:** To determine the effect different between Lower Limb Exercise in water and in land for functional improvement of the knee in patients with OA of the knee. **Participants and Methods:** We conducted a randomized controlled trial with knee OA patients using purposive sampling technique, randomly allocated into water (n=8) and land-based groups (n=8). Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) questionnaire were assessed at baseline and 2 weeks. **Result:** There was no significant different in outcomes between both groups after 2-weeks of follow-up. After 2 weeks, WOMAC score improved in both groups. No between-group differences were significantly different between the hydro and land-based groups (all $P > 0.683$). **Conclusion:** Both exercises equally improved functional state of the knee. Water and land-based exercise could improve functional state of the knee in patient with knee osteoarthritis.

Keywords: Lower Limb Exercise, Knee Functionality, Knee OA, *Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC)*