

## ABSTRAK

UNIVERSITAS MUHAMMADIYAH JEMBER  
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Karya Ilmiah Akhir, Juli 2025  
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Implementasi Tandem Walking Exercise Untuk Mengatasi Gangguan Keseimbangan Pada Lansia di UPT Panti Sosial Tresna Werdha (PSTW) Jember

XV + 95 hal + 13 tabel + 4 lampiran

### Abstrak

**Pendahuluan:** Lansia rentan mengalami gangguan keseimbangan akibat proses degeneratif yang meningkatkan risiko jatuh dan menurunkan kualitas hidup. Intervensi fisik seperti Tandem Walking Exercise dapat menjadi alternatif untuk meningkatkan keseimbangan. **Metode:** Penelitian ini merupakan studi kasus dengan desain deskriptif analisis menggunakan pendekatan proses intervensi. Subjek penelitian adalah tiga lansia dengan gangguan keseimbangan di UPT PSTW Jember yang dipilih berdasarkan kriteria inklusi. Data dikumpulkan melalui wawancara, observasi, pemeriksaan fisik dan dokumentasi. Intervensi Tandem Walking Exercise dilakukan setiap hari selama 1 minggu dengan durasi 15 menit per sesi. Hasil pengukuran menggunakan Timed Up and Go (TUG) test sebagai instrumen evaluasi keseimbangan. **Hasil:** Sebelum intervensi, ketiga klien menunjukkan nilai TUG >20 detik yang mengindikasikan risiko jatuh sedang hingga tinggi. Setelah intervensi, terdapat penurunan waktu TUG secara signifikan (rata-rata penurunan 5–7 detik) yang menunjukkan adanya peningkatan keseimbangan dan mobilitas fungsional. **Diskusi:** Latihan jalan tandem terbukti efektif meningkatkan keseimbangan postural dengan melatih kontrol proprioseptif, koordinasi otot dan respons vestibular. Hasil ini sejalan dengan penelitian sebelumnya yang menunjukkan Tandem Walking Exercise mengurangi risiko jatuh pada lansia. **Kesimpulan:** Implementasi Tandem Walking Exercise efektif meningkatkan keseimbangan pada lansia dengan gangguan keseimbangan. Disarankan penerapan latihan ini secara rutin sebagai bagian dari program rehabilitasi di panti sosial lansia.

**Kata Kunci:** Lansia, Gangguan Keseimbangan, Risiko Jatuh, *Tandem Walking Exercise*

## ABSTRACT

**MUHAMMADIYAH UNIVERSITY JEMBER  
NERS PROFESSIONAL STUDY PROGRAM  
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*Implementation of Tandem Walking Exercise to Address Balance Disorders in the Elderly at the Jember UPT Panti Sosial Tresna Werdha (PSTW) Jember*

*XV + 95 pages + 13 tables + 4 appendices*

### *Abstract*

**Introduction:** Elderly individuals are prone to balance disorders due to degenerative processes increasing their risk of falls and reducing quality of life. Physical interventions such as Tandem Walking Exercise can be an alternative to improve balance. **Methods:** This study used a case study design with a analysis descriptive approach and intervention process. The subjects were three elderly residents with balance disorders at UPT PSTW Jember selected based on inclusion criteria. Data were collected through interviews, observation, physical examinations, and documentation. The Tandem Walking Exercise was performed daily for 1 weeks, with each session lasting 15 minutes. Balance was evaluated using the Timed Up and Go (TUG) test. **Results:** Before the intervention, all three clients showed TUG scores >20 seconds, indicating moderate to high fall risk. After the intervention, there was a significant reduction in TUG time (an average decrease of 5–7 seconds), indicating improved balance and functional mobility. **Discussion:** Tandem Walking Exercise proved effective in enhancing postural balance by training proprioceptive control, muscle coordination, and vestibular response. These findings align with previous studies showing that Tandem Walking Exercise reduces fall risk in the elderly. **Conclusion:** The Tandem Walking Exercise implementation effectively improves balance in elderly individuals with balance disorders. Regular implementation of this exercise is recommended as part of rehabilitation programs in elderly care facilities.

**Keywords:** Elderly, Balance Disorders, Fall Risk, Tandem Walking Exercise