

Comparative Effects of Ergo Care Heel Raise Exercise and Step Marching Exercise on Improving Dynamic Balance in the Elderly

Ajeng Suko Handayani¹, Asita Rohmah Mutnawasitoh², Alinda Nur Ramadhani³,
Dita Mirawati⁴

ajenghandayani850@gmail.com.

^{1,2,3,4} Diploma IV Fisioterapi Universitas 'Aisyiyah Surakarta

ABSTRACT

Background: The increase in life expectancy has led to a growing elderly population, making them more vulnerable to physiological changes, particularly in muscles and the musculoskeletal system, which affect body balance. Impaired balance can decrease quality of life and raise the risk of falls. Physical exercises such as Ergo Care Heel Raise Exercise and Step Marching Exercise have the potential to improve dynamic balance through muscle strengthening and proprioceptor stimulation. **Objective:** To determine the difference in the effects of Ergo Care Heel Raise Exercise and Step Marching Exercise on improving dynamic balance in the elderly. **Methods:** This study employed a quantitative quasi-experimental design with a two-group test design using pre-test and post-test. It was conducted at Posyandu Lansia Dewi Ratih, Ngadirejo, Sukoharjo, involving 52 participants. Dynamic balance was assessed using the Timed Up and Go Test. **Results:** The Mann-Whitney test revealed a significance value of 0.011 ($p < 0.05$), indicating a significant difference between the two interventions. **Conclusion:** There is a significant difference in the effects of Ergo Care Heel Raise Exercise and Step Marching Exercise on improving dynamic balance in the elderly.

Keywords: Ergo Care Heel Raise Exercise, Step Marching Exercise, Balance, Timed Up and Go Test.