## THE EFFECT OF BALANCE EXERCISE ON LOWER EXTREMITY MUSCLE STRENGTH IN ELDERLY INDIVIDUALS AT SEGER WARAS INTEGRATED HEALTH POST MANTREN VILLAGE PACITAN

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## **ABSTRACT**

Background: The increase in the elderly population each year will lead to social, economic, and health-related issues. One of the health problems faced by the elderly is musculoskeletal disorders and a decrease in muscle mass, which manifest as difficulties in walking and weakness in the lower extremity muscles. Based on this condition, it is necessary to implement lower extremity muscle strength interventions for the elderly through physical activities. Balance exercise is a physical activity performed to build muscle strength in the lower limbs or legs. Objective: To determine the effect of balance exercise on lower extremity muscle strength in the elderly at Seger Waras Integrated Health Post, Mantren Village, Pacitan. Method: This is a quantitative study using a Quasi-Experimental Design with a one-group pre-test and post-test design. The study utilizes nonprobability sampling with purposive sampling technique. The population consists of 78 elderly individuals, and the sample includes 44 respondents. The research instrument used is the 30-second chair stand test, application of balance exercise. Results: After conducting data analysis using the Wilcoxon test, the obtained Pvalue was (0.000)<0.05. **Conclusion:** There is an influence of balance exercise on lower extremity muscle strength in the elderly at Seger Waras Integrated Health Post, Mantren Village, Pacitan.

**Keywords**: Elderly, Lower Extremity Muscle Strength, Balance Exercise.