THE EFFECT OF ECCENTRIC EXERCISE ON IMPROVING LOWER EXTREMITY MUSCLE STRENGTH IN ELDERLY

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ABSTRACT

Background: *Aging is one of the life cycles characterized by a gradual decline in the body's ability to maintain normal function. As age increases, elderly individuals experience decreased muscle mass and strength, which can cause mobility and balance disorders and increase the risk of falls. One exercise that can be used to improve lower extremity muscle strength in the elderly is Eccentric Exercise..**Objective:*** *To determine the effect of Eccentric Exercise on improving lower extremity muscle strength in the elderly.* ***Methods:*** *This study used a quasi-experimental method with a one group pre-test and post-test research design. The study was conducted on elderly individuals with decreased lower extremity muscle strength by providing Eccentric Exercise intervention. Lower extremity muscle strength was measured using the Five Times Sit to Stand Test (FTSST).* ***Results:*** *The results of the Wilcoxon test showed a p value of <0.001, where p value <0.05, therefore H0 was rejected and Ha was accepted. It can be concluded that Eccentric Exercise had an effect on improving lower extremity muscle strength in the elderly.* ***Conclusion:*** *There was an effect of Eccentric Exercise on improving lower extremity muscle strength in the elderly.*

Keywords: *Eccentric Exercise, lower extremity muscle strength, elderly, Five Times Sit to Stand Test (FTSST).*