

ABSTRACT

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CLOSED KINETIC CHAIN EXERCISE WAS BETTER THAN OPEN KINETIC CHAIN EXERCISE TO IMPROVE ABILITY OF GAIT ACTIVITY FOR ELDER PEOPLE WITH KNEE OSTEOARTHRITIS

Consist of VI Babs, 117 Pages, 16 Tables, 22 pictures and 9 attachments

Goal: to find out wheter closed kinetic chain exercise can better than open kinetic chain exercise to improve ability of gait activity for elder people with knee osteoarthritis. Sample: 20 elder patient was 50-72 years old, BMI 24-30 kg/m² and knee osteoarthritis grade I and II Kellgren & Lawrence scale in RSUD Raden Mattaher Jambi. Patient Sampling by purposive sampling technique conform to selected criteria. Sampels was divided to open kinetic chain exercise group amounted 10 people and closed kinetic chain exercise group amounted 10 people. Method: Research characteristic is quasi-experimental to learn about different from gait ability improvement on knee osteoarthritis by different interventions. Statistical analysis research by Paired Sample t-Test and Independent Sample t-Test. Result: Homogenity test by Levene's test result p = 0.251 ($p > \alpha = 0.05$) it means two group variants there is no different of timed up and go test time. Paired Samples t-Test in intervention group I show p = 0.001 and intervention group II show p = 0.001 where $p < \alpha$ ($\alpha = 0.05$) it means intervention in both groups has meaningful efect to increase gait time duration. Independent Samples t-Test result p = 0,002 where $p < \alpha$ ($\alpha = 0,05$) so that Ho was rejected, it means there is a different between gait time acceleration intervention group I and II. Conclusion: closed kinetic chain exercise was better than open kinetic chain exercise to improve ability of gait activity for elder people with knee osteoarthritis.

Key Word: Open and Closed Kinetic Chain exercise, elder people with knee Osteoarthritis, gait time duration of TUG test.