



ABSTRACT

SKRIPSI, August 2020

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ISOMETRIC HIP ABDUCTION EXERCISE EFFECT ON SQUAT EXERCISE AND LUNGES EXERCISE AGAINST KNEE STABILITY IN WOMEN'S WITH CASE OF PATELLOFEMORAL PAIN SYNDROME

Consists of VI chapters, 92 pages, 11 tables, 12 pictures, 5 schemes, 7 appendix

Objectives: This research had an objective to study the difference in the effects between isometric hip abduction exercise on squat exercise and lunges exercise for enhancing women's knee stability with patellofemoral pain syndrome. **Method:** This research was a quasi experiment with pre-post test the value of knee stability was measured using Star Excursion Balance Test (SEBT). Overall, there were 16 peoples as sampling of this research, which were divided into 2 groups. First, group I of 8 people treated with isometric hip abduction exercise and squat exercise Secondly, at group II of 8 people with isometric hip abduction exercise and lunges exercise. **Result:** This data had a normality distribution after tested with kolmogrov smirnov and had a homogenous variant data after tested homogeneity testing with paired sample t-test obtained a value of $p < 0,001$ which means the isometric hip abduction exercise and squat exercise had a significant effect to improve of knee stability. Meanwhile, At the group II, with the same way, obtained the value of $p < 0,213$ which means the isometric hip abduction exercise and lunges exercise had no significant effect on the enhancement of woman's knee stability with patellofemoral pain syndrome condition. Last, the results of the independent sample t-test showed the value $p = 0,001$ which means, there was a significant difference on knee stability between treatment group I and II. **Conclusion:** There were differences isometric hip abduction exercise effects on squat exercise and lunges exercise to increase the woman's knee stability.

Keywords: *Isometric hip abduction exercise, squat exercise, lunges exercise, stability, patellofemoral pain syndrome.*