

***DIFFERENCES IN THE EFFECT OF RETROWALKING AND RESISTANCE  
EXERCISE THERABAND ON IMPROVING FUNCTIONAL ACTIVITY IN  
ELDERLY KNEE OSTEOARTHRITIS***

Tsabitah Khoiriyyah<sup>1</sup>, Alinda Nur Ramadhani<sup>2</sup>

[tsabitakhoiriyyah1@gmail.com](mailto:tsabitakhoiriyyah1@gmail.com)

*'Aisyiyah University Surakarta*

***ABSTRACT***

***Background:*** Osteoarthritis is a condition in which the cartilage is damaged, characterized by changes in the joint capsule that holds it in place. The main symptoms of knee osteoarthritis include limitation of movement and functional activity. It can also experience pain, stiffness, muscle weakness and joint misalignment. ***Objective:*** to determine the difference in the effect of retrowalking and theraband exercise on increasing functional activity in osteoarthritis of the knee. ***Methods:*** This study used a quasi experimental approach and design using pre test and post test two group design. Sampling using Purposive Sampling technique with a total of 50 people divided into 2 groups. Group I amounted to 25 people given retrowalking. Group II amounted to 25 people given theraband resistance exercise. Measurement using the Western Ontario and McMaster Universities Arthritis Index (WOMAC) at the beginning and end of treatment. Data analysis using Wilcoxon effect test and Mann Whitney effect difference test. ***Results:*** Based on the results of statistical tests before and after treatment, group I obtained a p value = 0.002 ( $p < 0.05$ ) and group II obtained a p value = 0.014 ( $p < 0.05$ ), both indicating a difference before and after treatment. Mann-Whitney test after treatment between group I and group II obtained p value = 0.037 ( $p < 0.05$ ) which means there is a difference in influence. ***Conclusion:*** there is an effect on each group and there is a difference in effect between the two.

***Keywords:*** *Ostreoarthritis, Retrowalking, Theraband Exercise, Functional activity ability*