

## ABSTRACT



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### **The Relationship Between Body Mass Index and Gait Speed in Elderly Knee Osteoarthritis**

Consists of VI Chapters, 58 Pages, 8 Tables, 6 Images, 4 Attachments

**Objective:** Want to find out the pace of the elderly with OA genu conditions and See the relationship between body mass index to step speed in the elderly. **Method:** This type of research is crosssectional, the sample was selected based on purposive sampling technique. Based on the sample distribution the age of the mean and standard deviation was  $56.58 \pm 6.57$ , in the sample height the mean  $\pm$  SD was  $1.57 \pm 7.13$ , judging by the weight distribution the mean  $\pm$  SD  $54.58 \pm 10.12$ , seen from the body mass index distribution, the mean  $\pm$  SD  $2.25 \pm 1.15$ , judging by the distribution of osteoarthritis velocity with TUG mean  $\pm$  SD  $14.83 \pm 7.45$ , and based on the distribution of TUG samples it has a mean  $\pm$  SD  $14,83 \pm 7.45$ . **Results:** The normality test with Shapiro Wilk test showed normal distribution data while the Spearman rank test statistic test, the significant value of count (2-tailed) was 0.956, where  $p < 0.05$ . The results of this statistical test show that there is a relationship between body mass index and step speed in elderly people with very strong osteoarthritis genu conditions. For the results of the correlation between BMI and TUG there is a significant value between the two variables  $p = 0.05$ . **Conclusion:** There is a relationship between body mass index at step speed in the elderly with Osteoarthritis

**Keywords:** Body Mass Index, Osteoarthritis, Time Up and Go test.