

## **ABSTRACT**

### **THE INFLUENCE OF ROM (RANGE OF MOTION) FREQUENCY OF EXERCISE ON JOINT PAIN AND ANXIETY IN ELDERLY WITH KNEE PAIN**

*The elderly experience a decrease in the musculoskeletal system characterized by joint pain in the knee. Knee pain can affect activities that lead to feelings of anxiety. The prevalence of knee pain in Indonesia is recorded at 8.1%, the prevalence of knee pain in Jombang is 4.67%. One of the knee pain therapies is exercise range of motion. The aim of the study was to analyze the effect of the frequency of exercise ROM on joint pain and anxiety in the elderly with complaints of knee pain. The research design was Quasi-Experimental with pre and post test control group design approach. The Population of all elderly with complaints of knee pain was 42 respondents. The sample was divided into 3 groups with a sample size of 14 respondents each. Sampling using simple random sampling. Data analysis used the Wilcoxon, Kruskal Wallis and Mann Whithney tests because the data were not normally distributed with a significance level of  $\alpha=0.05$ . Before the intervention 54.8% of respondents experienced severe joint pain, after the intervention 64.3% of respondents experienced moderate joint pain. Before the intervention 52.4% of respondents experienced moderate anxiety, after the intervention 42.9% of respondents experienced moderate anxiety. The result of the Wilcoxon test for joint pain variables obtained the intervention group 1 ( $p=0.008$ ), intervention 2 ( $p=0.000$ ) and control ( $p=0.083$ ). Meanwhile, the anxiety variable found the intervention group 1 ( $p=0.005$ ), intervention 2 ( $p=0.001$ ) and control ( $p=0.083$ ). Kruskal Wallis test result variable joint pain ( $p=0.000$ ), anxiety ( $p=0.000$ ). So  $H_0$  is rejected, it means that there is an effect of giving exercise ROM on joint pain and anxiety. Giving exercise ROM can reduce joint pain and anxiety in the elderly with Knee Pain complaints. The more frequent exercise ROM is, the more effective it is in reducing joint pain and anxiety. It is hoped that health workers will carry out nursing interventions using exercise ROM, so that the prevalence of joint pain is reduced and the anxiety of the elderly can be avoided.*

*Keywords: Exercise ROM, joint pain, anxiety.*