The Effect of Giving Diaphragm Respiratory Exercise on Increasing Trunkus Flexibility in Patients with Low Back Mechanical Pain

Nurasipa¹, Dewi Kusuma Hartono², Romadhoni²

¹Student of the Faculty of Medicine, University of Muhammadiyah Semarang ²Lecturers of the Faculty of Medicine, University of Muhammadiyah Semarang E-Mail : <u>nurasipa.unimus@gmail.com</u>

ABSTRACT

Background : Low back pain (LBP) is pain in the lower back area. A person can experience LBP complaints when working with non-ergonomic postures, manual handling and working with high frequency and duration. Breathing exercise or diaphragmatic breathing exercise is one therapy that can be done to reduce pain. The purpose of this study was to determine the effect of giving diaphragmatic breathing exercises to increase truncal flexibility in patients with mechanical low back pain. *Methods* : The design of this research is guasiexperimental with pre-test and post-test with control group design. Using purposive sampling technique with the number of respondents 19 intervention groups and 19 control groups at Dr. Hospital employees. Adhyatma MPH. The instruments in this study were questionnaires and a physical examination with the modified schober test, the results of which were analyzed using the McNemar Change Test. **Results** : Based on the statistical test using the McNemar Change Test, the results obtained are Sig. (2-tailed) P 0.001 < 0.05, which means Ho is rejected, namely there is an effect of diaphragmatic breathing exercises on increasing trunk flexibility in patients with mechanical low back pain. Conclusion : There is a significant effect after giving diaphragmatic breathing exercises to increase trunk flexibility in patients with mechanical low back pain.

Keyword : Low Back Pain, Diaphragm Breathing Exercise, Modified Schober Test