

IS WHOLE BODY VIBRATION EXERCISE REDUCE LOW BACK PAIN IN HEAVY EQUIPMENT OPERATOR WORKERS?

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ABSTRACT

Background: Low back pain can result from a strain (injury) to muscles or tendons in the back. Heavy equipment operators have a high risk of developing LBP due to prolonged sitting and vibrations from the machine. This will result in injury, stiffness in the joints and spine. This study aims to analyze the effect of whole body vibration exercise on reducing low back pain in heavy equipment operators.

Subjects and Method: This was a meta-analytical study and a systematic review. The articles used were obtained from several electronic databases including Google Scholar, PubMed, Springer Link, Clinical key and ProQuest. The articles used in this study are articles that have been published from 2011-2021. The keywords used in the search were “stretching and whole body vibration exercise”, “stretching or whole body vibration exercise or low back pain”, “stretching or whole body vibration exercise”. The article under study is a full-text article with a Randomized Controlled Trial (RCT) design, a measure of the relationship used with the Mean SD. Articles were collected using the PRISMA diagram, and analyzed using the Review Manager 5.4.

Results: Whole body vibration exercise lowered low back pain (SMD= -0.37; 95% CI= -0.72 to -0.02; p= 0.04).

Conclusion: Whole body vibration exercise lowers low back pain.

Keywords: low back pain, whole body vibration exercise

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