

**EFFECTIVENESS OF STRETCHING EXERCISE EVERY 2 HOURS TO
REDUCE PAIN DUE TO THE RISK OF MUSCULOSKELETAL DISORDER
(MSDs) IN FACTORY WORKERS AT UD BERDIJAYA PALUR**

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ABSTRACT

Background: Workers who experience MSDs occur as a result of sitting statically and repeatedly for a long time, which can cause pain, so stretching exercises are carried out every 2 hours which can reduce the pain felt due to MSDs. **Objective:** to determine the effectiveness of giving stretching exercises every 2 hours to reduce pain due to the risk of musculoskeletal disorders (MSDs). **Subjects and Methods:** This research was conducted on factory workers at UD Berdijaya Palu. The population experiencing MSDs complaints is 150 respondents. This study used the Pre-Post Test One Group Design by taking subjects using purposive sampling, so that the number of subjects who met the inclusion, exclusion and drop out criteria was 40 respondents. The dependent variable in this study is pain reduction due to the risk of MSDs and the independent variable is stretching exercises every 2 hours. The research instruments used questionnaires, interviews, MSDs screening, as well as IPAQ and NRS measurements. Stretching exercise interventions are carried out every 2 hours every 2 weeks. Data analysis used the Wilcoxon effect test. **Results:** The results of this study showed that there were differences in NRS values before and after being given stretching exercises every 2 hours with a significance value of $P=0.025$ for NRS. **Conclusion:** Stretching exercises every 2 hours are effective in reducing pain due to the risk of MSDs in workers.

Keywords: musculoskeletal disorders, stretching exercises, pain, workers