

## ABSTRAK

Erin Chairudina Sa'adah

FAKTOR YANG BERPENGARUH TERHADAP KETEGANGAN OTOT (*MUSCULOSKELETAL DISORDERS*) PADA PEKERJA PANDE BESI (Studi Kasus di UD. Logam Sari Logam Sari Desa Kiping Kec. Gondang, Kab. Tulungagung).

xvi + 91 Halaman + 38 Tabel + 15 Gambar + 8 Lampiran

Pekerjaan pande besi tergolong pekerjaan yang memerlukan pengerahan tenaga yang kuat. Postur kerja yang tidak alamiah akan menambah pembebahan bagi pekerja sehingga berisiko terhadap ketegangan otot (*Musculoskeletal Disorders*). Keluhan ketegangan otot terjadi pada bagian otot rangka yang dirasakan oleh seseorang karena otot menerima beban statis secara terus-menerus dalam waktu lama. Penelitian ini bertujuan untuk mengetahui faktor yang berpengaruh terhadap ketegangan otot (*Musculoskeletal Disorders*) terhadap pekerja pande besi di UD. Logam Sari.

Penelitian ini menggunakan jenis penelitian observasional analitik dengan pendekatan *cross-sectional study* dengan jumlah sampel sebanyak 39 pekerja yang diambil secara proporsional. Pengumpulan data dilakukan melalui observasi, wawancara, dan pengukuran. Pengukuran beban kerja fisik berdasarkan denyut nadi pekerja sedangkan penilaian postur kerja menggunakan metode *Rapid Upper Limb Assessment* (RULA). Penilaian tingkat keparahan ketegangan otot (*musculoskeletal disorders*) berdasarkan metode *Nordic Body Map* (NBM). Selanjutnya data dianalisis menggunakan uji *Chi Square* dan *Fisher's Exact*.

Berdasarkan hasil penelitian pada penilaian tingkat keluhan ketegangan otot menunjukkan bahwa sebanyak 41,0% pekerja mengalami ketegangan otot kategori tinggi dan 59% pekerja mengalami ketegangan otot rendah. Faktor yang berpengaruh terhadap ketegangan otot pada pekerja pande besi di UD. Logam Sari yaitu umur, jenis kelamin, masa kerja, dan postur kerja.

Disarankan agar perusahaan menerapkan manajemen waktu istirahat, membuat desain stasiun kerja yang nyaman, menyediakan fasilitas layanan kesehatan, dan memberikan edukasi mengenai keselamatan dan kesehatan kerja.

Kata Kunci : Pande besi, Postur kerja, Ketegangan Otot

Daftar Bacaan : 21 buku, 10 jurnal (2011 – 2019)

## ABSTRACT

Erin Chairudina Sa'adah

### FACTORS THAT AFFECT OF MUSCLE TENSION (MUSCULOSKELETAL DISORDERS) FOR BLACKSMITH'S WORKERS

(Case Study in UD. Logam Sari Kiping Village, Gondang District, Tulungagung)  
xvi + 91 Pages + 38 Tabels + 15 Pictures + 8 Attachments

A Blacksmith workers is a job that requires a lot of energy. The unnatural of working posture will increase the burden for workers so that they are potentially affected the risk of muscle's tension (*Musculoskeletal Disorders*). Complaints of muscle's tension occur in the portion of skeletal muscle that felt by a worker because the muscle receives a static load continuously for a long time. This study aims to determine the factors that affect to muscle tension (*Musculoskeletal Disorders*) for blacksmith workers in UD. Logam Sari.

The type of this research is analytic observational with cross-sectional study approach. Total of the workers are 39 people which is taken with proportional. The data was collected by observation, interviews, and measurements to the blacksmith workers. Measurements of physical work-load is based on human's pulse while the assessment of working posture uses *Rapid Upper Limb Assessment* (RULA). The assessment of *Musculoskeletal Disorders* is based on *Nordic Body Map* (NBM) method. Then data were analyzed by using *Chi Square* and *Fisher's Exact Test*.

The result shows that the workers as much as 41,0% suffer muscle tension with high category and 59,0% suffer muscle tension with low category. The influential factors to the muscle tension for blacksmith workers are age, gender, working time, and working posture.

The recommendation for the industry are applying management of resting time, making a comfortable working station design, providing health care facilities, and giving education about occupational safety and health.

Keywords : Blacksmith, working posture, *Musculoskeletal Disorders*  
Reading List : 21 book, 10 journal (2011 – 2019)

