

INTISARI

Latar belakang: PT INKA (Persero) merupakan industri yang bergerak di bidang perhubungan darat khususnya perkeretaapian mempunyai potensi dan faktor bahaya yang cukup tinggi. PT INKA (Persero) Madiun memiliki alat angkat dan angkut seperti kereta dorong, *forklift*, *crane*, serta *tambangan*, tetapi masih terdapat beberapa pekerjaan *manual handling*. Hari kerja efektif dalam satu minggu adalah lima hari kerja. Data dari Poli Klinik Inka (Polinka) di tahun 2019 terdapat 3-4 pekerja *workshop* menderita *low back pain* setiap bulannya. Penulis menyadari hal tersebut maka perlu adanya studi tentang ergonomi dan keluhan MSDs di PT INKA (Persero) Madiun.

Tujuan penelitian: Tujuan dari penelitian ini adalah untuk mengetahui postur kerja pada pekerja *workshop* di PT INKA (Persero) Madiun.

Metode Penelitian: Jenis penelitian ini adalah penelitian kuantitatif dengan menggunakan pendekatan *cross sectional* yang bertujuan untuk mengetahui dinamika pengaruh postur kerja terhadap keluhan MSDs dalam satu waktu. Penilaian postur kerja penelitian ini menggunakan metode *Ovako Working Posture Analysis System* (OWAS) serta variabel lain seperti variabel usia, merokok, masa kerja dan durasi kerja untuk mengukur keluhan *Musculoskeletal Disorders* (MSDs) pada 36 pekerja *workshop* unit PMK *Bogie*.

Hasil Penelitian: Hasil penelitian menunjukkan postur kerja dan masa kerja memiliki korelasi terhadap keluhan *Musculoskeletal Disorders* (MSDs), dimana terdapat dua pekerja dengan keluhan MSDs-nya tinggi pada pekerjaan *Reforming Macro* yang nilai postur kerjanya berisiko tinggi bagi MSDs.

Kesimpulan: Adanya risiko bahaya ergonomi dikarenakan ketidaksesuaian antara peralatan yang digunakan pekerja serta kondisi kerja dengan ukuran tubuh pekerja. Berdasarkan penilaian menggunakan metode *Ovako Working Postural Analysis System* (OWAS) perlu adanya perbaikan, terutama pada pekerjaan *Reforming Macro*, Pengeboran A, *Grinding*, dan Pengelasan. Pekerjaan *Reforming Macro* dan *Grinding* memiliki tingkat resiko tinggi terhadap *Musculoskeletal Disorders* (MSDs).

Kata Kunci: *Musculoskeletal Disorders* (MSDs), Postur Kerja, Durasi Kerja, Usia, Masa Kerja, Merokok.

ABSTRAK

Background: PT INKA (Persero) is an industry engaged in inland transportation, especially railways, which has a high potential and hazard factor. PT INKA (Persero) Madiun has lifting and transportation equipment such as strollers, forklifts, cranes, and mines, but there are still some manual handling jobs. Effective working days in one week are five working days. Data from the Inka Clinic (Polinka) in 2019 there were 3-4 workshop workers suffering from low back pain every month. The author realizes that it is necessary to study ergonomics and MSDs complaints at PT INKA (Persero) Madiun.

Research objectives: The purpose of this study was to determine the work posture of workshop workers at PT INKA (Persero) Madiun.

Research Methods: This type of research was a quantitative study using a cross-sectional approach that aims to determine the dynamics of the effect of work posture on MSDs complaints at one time. The assessment of work posture in this study used the Ovako Working Posture Analysis System (OWAS) method and other variables such as age, smoking, working period, and duration of work to measure complaints of Musculoskeletal Disorders (MSDs) in 36 workshop workers of the Bogie PMK unit.

Results: The results of the study show that work posture and tenure correlate with complaints of Musculoskeletal Disorders (MSDs). There are two workers with high MSDs complaints in Reforming Macro jobs whose work posture values are at high risk for MSDs.

Conclusion: There is a risk of ergonomics hazard due to a mismatch between the equipment used by workers and working conditions with the worker's body size. Based on the assessment using the Ovako Working Postural Analysis System (OWAS) method, it is necessary to improve, especially on Macro Reforming, A Drilling, Grinding, and Welding work. Reforming Macro and Grinding jobs have a high level of risk for Musculoskeletal Disorders (MSDs).

Keywords: Musculoskeletal Disorders (MSDs), Work Posture, Duration of Work, Age, Working Period, Smoking.