

INTISARI

Latar belakang: Keselamatan dan kesehatan kerja (K3) pada usaha kerja menengah (UKM) sangat dibutuhkan karena hampir 70% UKM di Indonesia tidak mengetahui keselamatan dan kesehatan kerja (K3). Penyakit akibat kerja (PAK) pada pekerja tenun yaitu keluhan *Musculoskeletal Disorders* (MSDs) disebabkan karena postur kerja yang tidak alamiah (menjanggal) dapat mengakibatkan terganggunya otot-rangka dan beban kerja tinggi dapat mempengaruhi terjadinya pembebanan pada otot, sehingga dapat mengakibatkan kelelahan pada pekerja karena terkumpulnya asam laktat dalam otot serta peredaran darah yang diakibatkan dari proses kontraksi suatu pekerjaan yang tidak ergonomi yang berlangsung dalam kurun waktu lama dan berulang-ulang. Pada industri pembuatan kain lurik di Bantul Daerah Istimewa Yogyakarta (DIY) yaitu Kurnia Lurik melalui proses pembuatan kain lurik yang berlangsung dalam waktu 1,5 sampai 2 bulan yang masih menggunakan alat tenun bukan mesin (ATBM).

Tujuan penelitian: Tujuan dari penelitian ini adalah untuk menganalisis faktor risiko ergonomi pekerja Industri Kurnia Lurik Sewon Bantul Daerah Istimewa Yogyakarta (DIY) terhadap keluhan *Musculoskeletal Disorders* (MSDs).

Metode penelitian: Metode yang digunakan dalam penelitian ini adalah metode kuantitatif. Jenis penelitian ini merupakan jenis penelitian observasional analitik dengan menggunakan rancangan *Cross Sectional*. Penilaian postur kerja menggunakan metode *Rapid Entire Body Assessment* (REBA), penilaian kelelahan kerja (subjektif) menggunakan metode *Nordic Body Map* (NBM), pengukuran asam laktat dalam darah digunakan dalam mengukur kelelahan kerja (objektif), kemudian diperkuat dengan adanya variabel terkontrol meliputi variabel masa kerja dan durasi kerja dalam mengukur keluhan *Musculoskeletal Disorders* (MSDs) pada 30 pekerja industri Kurnia Lurik. Data penelitian dianalisis dan diinterpretasikan menggunakan *Statistic Stata 12*. Analisis data bivariat menggunakan uji *Chi-Square* dan analisis data multivariat menggunakan uji *Logistic Regression*.

Hasil Penelitian dan Pembahasan: Hasil penelitian menunjukkan postur kerja pekerja Kurnia Lurik merupakan risiko bahaya ergonomi yaitu kondisi pekerjaan dan peralatan kerja yang digunakan pekerja tidak sesuai dengan postur tubuh pekerja. Kelelahan kerja (subjektif) dan kelelahan kerja (objektif) pekerja Kurnia Lurik merupakan risiko bahaya lingkungan kerja yaitu risiko bahaya berupa faktor fisik, kimia, biologi, psikososial, dan ergonomi. Beban kerja pekerja Kurnia Lurik merupakan risiko bahaya bagi tubuh pekerja yaitu yang berasal dari tubuh pekerja, seperti kapasitas kerja dan status kesehatan pekerja. Masa kerja dan durasi kerja pekerja Kurnia Lurik merupakan risiko bahaya terhadap pengorganisasian pekerja dan budaya kerja yaitu risiko kerja yang berkaitan dengan beban kerja pekerja yang berlebih dan waktu kerja berlebih pada pekerja.

Kesimpulan: Adanya risiko bahaya ergonomi dikarenakan ketidaksesuaian antara peralatan yang digunakan pekerja serta kondisi kerja dengan ukuran tubuh pekerja.

Kata Kunci: *Musculoskeletal Disorders* (MSDs), Postur Kerja, Kelelahan Kerja, Beban Kerja, Lama Kerja, Durasi Kerja.

ABSTRAK

Background: Occupational safety and health (K3) in medium-sized businesses (UKM) is needed because almost 70% of SMEs in Indonesia do not know occupational safety and health (K3). Occupational diseases (PAK) in weaving workers, namely complaints of musculoskeletal disorders (MSDs) caused by unnatural work postures (clumsy) can result in disruption of skeletal muscles and high workload can affect the occurrence of loading on the muscles so that it can result in fatigue in workers because of the accumulation of lactic acid in the muscles and blood circulation resulting from the contraction process of an ergonomic work that takes place over a long period of time and repeatedly. In the lurik fabric manufacturing industry in the Bantul Special Region of Yogyakarta (DIY), namely Kurnia Lurik through the lurik fabric manufacturing process that takes place in 1.5 to 2 months that still uses non-machine looms (ATBM).

Research Objectives: The purpose of this study was to analyze the risk factors for ergonomics of workers in the Kurnia Lurik Sewon Bantul Industry Special Region of Yogyakarta (DIY) against complaints of Musculoskeletal Disorders (MSDs).

Research Methods: The method used in this study is a quantitative method. This type of research is a type of observational analytic study using a cross-sectional design. Assessment of work posture using the Rapid Entire Body Assessment (REBA) method, assessment of work fatigue (subjective) using the Nordic Body Map (NBM) method, measurement of lactic acid in the blood is used to measure work fatigue (objective), then reinforced by the presence of controlled variables including variables work period and duration of work in measuring Musculoskeletal Disorders (MSDs) complaints in 30 Kurnia Lurik industrial workers. The research data were analyzed and interpreted using Stata 12 statistics. Bivariate data analysis used the Chi-Square test and multivariate data analysis using the Logistic Regression test.

Research Results and Discussion: The results of the study show the work posture of Kurnia Lurik workers is a risk of ergonomic danger that is the working conditions and work equipment used by workers not in accordance with the work posture of workers. Work fatigue (subjective) and work fatigue (objective) of Kurnia Lurik workers constitute risk of work environment hazards, namely the risk of hazards in the form of physical, chemical, biological, psychosocial, and ergonomic factors. Workload of Kurnia Lurik workers is a risk of danger to the worker's body that is derived from the worker's body, such as work capacity and health status of workers. Work period and duration of work of Kurnia Lurik workers constitute a risk of harm to the organization of workers and a work culture that is work risk associated with excessive workload of workers and excessive work time for workers.

Conclusion: There is a risk of ergonomic hazards due to mismatch between equipment used by workers as well as working conditions with workers' body measurements.

Keywords: Musculoskeletal Disorders (MSDs), Work Posture, Work Fatigue, Workload, Work Length, Work Duration