ABSTRACT

The Relationship Between Physical Workload and *Musculoskeletal Disorders* Complaints at PT. Surya Gemilang Mansurin (Anugerah) Among Employee Shuttle Bus Drivers

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Musculoskeletal disorders (MSDs) are among the occupational health problems most commonly experienced by workers worldwide, including those in the transportation sector and among professional drivers. In Indonesia, the prevalence of MSD complaints among workers is relatively high, including within the population of bus drivers. Employee shuttle bus drivers at PT. Surya Gemilang Mansurin (Anugerah) have distinctive operational characteristics, namely fixed routes, double-shift work patterns with limited recovery breaks, and driving durations that are not always proportional to the distance travelled, which may increase physical workload and the risk of MSD complaints. Objective: This study aims to analyze the relationship between physical workload and MSD complaints among employee shuttle bus drivers at PT. Surya Gemilang Mansurin (Anugerah). Method: This study used a quantitative approach with a cross-sectional design. The sample consisted of 33 workers, selected using a simple random sampling technique. Physical workload was measured using the Cardiovascular Load (CVL) method, while MSD complaints were measured using the Nordic Body Map (NBM) questionnaire. Data were analyzed using the Spearman Rank correlation test. Results: The results showed that 17 workers (52%) were in the physical workload category requiring improvement, while 19 workers (58%) experienced MSD complaints in the moderate-risk category. Statistical test results showed a p-value of 0.106 ($p>0.05$) with a correlation coefficient of $r=0.287$. There was no significant relationship between physical workload and MSD complaints among employee shuttle bus drivers.

Keywords: physical workload, *musculoskeletal disorders*, *Cardiovascular Load*, *Nordic Body Map*, employee shuttle bus drivers