

## ER73: Effects of physical and personal risk factors on sick leave due to musculoskeletal disorders

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### Abstract

The purpose of this study was to investigate the effects of physical and personal risk factors on sick leave due to musculoskeletal disorders in an Iranian car manufacturing company.

This cross-sectional study was conducted at assembly plant of a car company. 234 workers were randomly selected who had sick leave due to musculoskeletal disorders during last year. Physical ergonomics risk factors checklist and personal information questionnaire were used as data gathering tools.

There was no significant relationship between physical risk factors and sick leave ( $p > 0.05$ ). Smoking habit ( $P = 0.045$ ) and age ( $P = 0.044$ ) showed significant relationship with sick leave. Workers with lumbar deviation  $> 20-60^\circ$  ( $OR = 1.104$ ) and lumbar deviation  $> 60^\circ$  ( $OR = 1.11$ ) were at more risk. The ratio among employees with repetitive works ( $OR = 1.309$ ) and workers with force exertion ( $OR = 1.358$ ) were greater than employees who were not in these working conditions.

Taking preventive or modifying actions for the improvement of the ergonomic working conditions of assembly workers and their lifestyle seemed crucial.

**Key words:** Sick leave; Physical risk factors; Musculoskeletal disorders; Assembly workers; Car manufacturing.

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