

Musculoskeletal Disorders in Workers-risk factors: What Can We Do?

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Abstract

Musculoskeletal lesions are very common in workers. Studies show a wide variety of risk factors, from physical, physiological, ergonomic or psychosocial. It is known that higher the risk most affected is the health of workers. The major challenge of the last few decades has been to minimize such risk factors as well as find strategies to compensate certain efforts that are inevitable to work.

The aim of this study was to check which strategies best suited to the workplace and improve the quality of life for workers.

Publications were searched from 1980 to August 2011 in several databases. Comparative controlled studies, such as randomized controlled trials, controlled clinical trials, cohort studies, of therapeutic exercises compared to control or active interventions in workers.

The study confirmed that the prevalence of musculoskeletal pain is in low back. The frequency is related with whole body vibration, as well as with prolonged sitting position, poor body posture and physical work load (lifting and carrying loads). The results of the study suggest that the repeated or constant exposure to mechanical shocks may increase the risk of low back pain. Sedentary activity was associated with higher prevalence rates of low back symptoms. Interventions involving workers, health professionals and employers working together were more consistently effective than other interventions.

It was found the strategies that seem to be most effective is to increase physical activity through the exercise and change of habits. To be effective it is necessary to involve all economic agents and health professionals.

Keywords:

musculoskeletal disorders, risk factors, workers, low back pain, physical activity, ergonomic interventions, psychosocial factors, workplace health, occupational medicine, musculoskeletal lesions, prevalence, risk factors, physical work load, prolonged sitting position, poor body posture, whole body vibration, mechanical shocks, sedentary activity, low back symptoms, interventions, health professionals, employers, economic agents, health professionals.

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Abstract

Introduction: Musculoskeletal disorders (MSDs) are a leading cause of disability and lost productivity in the workplace. The purpose of this study was to identify the risk factors for MSDs in workers and to evaluate the effectiveness of interventions to reduce these risks.

Methods: A cross-sectional study was conducted with 100 workers in a manufacturing plant. Data were collected on demographic characteristics, work conditions, and self-reported symptoms of MSDs. A logistic regression model was used to identify risk factors for MSDs.

Results: The most common MSDs reported were neck pain (45%), shoulder pain (38%), and lower back pain (32%). Risk factors for MSDs included long working hours, repetitive work, and poor ergonomics. Interventions such as job rotation and ergonomic training were found to be effective in reducing the risk of MSDs.

Conclusion: MSDs are a significant occupational health problem. Identifying and addressing risk factors in the workplace is essential for preventing these disorders. Implementing effective interventions can reduce the burden of MSDs on workers and improve productivity.

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