

WORK-RELATED PSYCHOSOCIAL RISK FACTORS IN RELATION TO PAIN IN NECK AND UPPER EXTREMITIES

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Aim

The aim of this study was to investigate the relationship of work-related psychosocial factors, such as quantitative job demands, skill discretion, decision authority, supervisor support and co-worker support with pain in neck and upper extremities.

Methods

This study was a secondary analysis with data of the Study on Musculoskeletal disorders, Absenteeism, Stress and Health (SMASH). SMASH is a prospective cohort study in a working population, with a follow-up period of 3 years. 1.738 workers from 34 companies in the Netherlands participated. From this group a cohort of 1029 workers without pain in neck and upper extremities was identified. Information on possible risk factors was obtained at baseline: psychosocial risk factors and individual factors by means of questionnaires and physical load at work by means of analyses of video-recordings and questionnaires. Workers were defined as cases when they reported that they had had regular or prolonged pain in neck or upper extremities, at least during one of the annual measurements.

Results

The 3-year cumulative incidence of pain in neck or upper extremities was 31.9%, of pain in neck or shoulders 23.5% and of pain in hands, wrists, arms or elbows 15%. After adjustment for physical and individual factors an increased risk was observed for workers with high quantitative job demands (odds ratio: 2.2; confidence interval: 1.1-4.5), and for workers with low co-worker support (odds ratio: 2.8; confidence interval: 1.2-6.3). Skill discretion, decision authority, and supervisor support were not related to the development of pain in neck or upper extremities.

Conclusion

High quantitative job demands and low co-worker support increase the risk of pain in neck, shoulders, hands, wrists, arms or elbows.