

WORK-RELATED PHYSICAL AND PSYCHOSOCIAL RISK FACTORS FOR SICKNESS ABSENCE DUE TO NECK PAIN: RESULTS OF A PROSPECTIVE COHORT STUDY

Ariëns, G.A.M.^{1,2}, Bongers, P.M.¹, Hoogendoorn, W.E.^{1,2}, Van der Wal, G.², Van Mechelen, W.²

¹ TNO Work and Employment, Hoofddorp, The Netherlands.

² EMGO-Institute / Department of Social Medicine, VU medical centre, Amsterdam, The Netherlands.

Aims.

To investigate whether work-related physical and psychosocial factors are risk factors for sickness absence due to neck pain.

Methods.

Data were used from SMASH (Study on Musculoskeletal disorders, Absenteeism, Stress and Health), a 3-year prospective cohort study in a working population (N=1,750). Baseline data on work-related physical load were collected by means of video-recordings, whereas baseline data on work-related psychosocial load were collected by means of a questionnaire. Work-related physical and psychosocial variables were related to the frequency of sickness absence due to neck pain (minimal duration 3 days), which was registered by the participating companies during the follow-up period. Adjustments were made for other physical, psychosocial, and individual variables.

Results.

Complete data from 758 workers without sickness absence due to neck pain at baseline were used in the analysis. Adjusted rate ratios (95% CI) are presented in the table.

Variable	Classification	Adjusted rate ratio
Neck flexion > 20 degrees*	> 40% compared to < 30%	4.2 (1.5-11.7)
Neck rotation > 45 degrees*	> 25% compared to < 25%	2.8 (1.3-6.1)
Sitting posture*	> 95% compared to < 1%	1.7 (0.5-6.3)
Quantitative job demands	high compared to low	2.0 (0.8-4.6)
Decision authority	low compared to high	3.7 (1.4-9.3)
Skill discretion	low compared to high	1.6 (0.7-3.7)
Co-worker support	low compared to high	0.5 (0.1-2.7)
Supervisor support	low compared to high	1.0 (0.4-2.6)

* Percentage of the working time

Conclusions.

Working with the neck flexed for more than 40% of the working time, working with the neck rotated for more than 25% of the working time, as well as low decision authority are significant and independent risk factors for sickness absence due to neck pain. Furthermore, non-significant increased risks were found for the relationship between prolonged sitting, high quantitative job demands and low skill discretion on one side, and sickness absence due to neck pain on the other side.