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**THE EFFECTIVENESS OF PARTICIPATORY ERGONOMICS TO PREVENT LOW BACK PAIN AND NECK PAIN: RESULTS OF A CLUSTER RANDOMISED CONTROLLED TRIAL**

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10.1136/oemed-2011-100382.202

**Objectives** To investigate the effectiveness of the Stay@Work Participatory Ergonomics program (PE) aimed at prevention of low back pain (LBP) and neck pain (NP).

**Methods** Departments were randomly allocated to either the intervention (PE) or control group (no PE). During a 6-h meeting, working groups composed and prioritised ergonomic measures aimed at preventing LBP and NP. Subsequently, working groups were requested to implement the prioritised ergonomic measures in their departments. Data was collected using questionnaires at baseline, and after 3, 6, 9, and 12 months of follow-up. The primary outcomes were LBP and NP prevalence; secondary outcomes were pain intensity and duration. Additionally, the course of LBP and NP (transitions from no symptoms to symptoms as well as from symptoms to no symptoms) was modelled.

**Results** Randomisation resulted in 19 intervention departments (n=1472 workers) and 18 control departments (n=1575 workers). After 12 months the intervention was neither more effective than the control group in reducing the prevalence of LBP and NP nor in reducing pain intensity and pain duration. PE did not increase the probability of preventing LBP (OR 1.23; 95% CI 0.97 to 1.57) or NP (1.01; 0.74 to 1.40). However, PE significantly increased the probability of recovering from LBP (1.41; 1.01 to 1.96), but not from NP (0.95; 0.72 to 1.26).

**Conclusions** PE did not reduce LBP and NP prevalence, pain intensity and pain duration, and was neither effective in preventing LBP and NP nor in recovering from NP. However, PE was more effective in recovering from LBP.