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EFFECTS OF PERSONAL AND WORK-RELATED FACTORS ON THE INCIDENCE OF SHOULDER PAIN IN A FRENCH WORKING POPULATION

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10.1136/oemed-2011-100382.385

Objectives To assess the effects of personal and work-related factors on the incidence of shoulder pain in a large working population from a French region.

Methods Between 2002 and 2005, 3710 workers (58.2% men and mean $\pm$ SD age of 38.7 ± 10.3 years) were included in a French surveillance program. They have completed a self-administered questionnaire about musculoskeletal symptoms, personal factors and work exposure. In 2007, 2332 subjects responded again (63.2%). Nordic questionnaire was used in both questionnaires to assess shoulder pain during the preceding 7 days. Associations between personal and work-related (organizational, biomechanical and psychosocial) factors at baseline and new onset of shoulder pain at follow-up were studied by multivariate logistic regression, according to gender.

Results A total of 1814 workers (1037 men and 777 women) without shoulder pain at baseline were eligible for analyses. Incidence of shoulder pain was 12.9% for men and 22.5% for women. In men, age (OR 1.2 to 2.8), high physical demand (OR 1.5) and holding hand behind the trunk (OR 2.1) increased the risk of incident shoulder pain. In women, age (OR 1.5 to 2.8), BMI (OR 1.5), temporary employment (OR 1.8), high physical demand (OR 1.6) and low decision authority (OR 1.6) were associated with incident shoulder pain.

Conclusions Age was the strongest predictor for new onset of shoulder pain in both genders. Biomechanical and psychosocial factors were also identified as risk factors whereas no factors related to work organisation remained in the final models.