OBJECTIVES: To quantify the variation in rates of absence due to musculoskeletal pain across 47 occupational groups (mostly nurses and office workers) from 18 countries, and to explore personal and group-level risk factors that might explain observed differences.

METHODS: A standardised questionnaire was used to obtain information about musculoskeletal pain, sickness absence and possible risk factors in a cross-sectional survey of 12,416 workers (92-1017 per occupational group). Additionally, group-level data on socioeconomic variables, such as sick pay and unemployment rates, were assembled by members of the study team in each country. Associations of sickness absence with risk factors were examined by Poisson regression.

RESULTS: Overall, there were more than 30-fold differences between occupational groups in the 12-month prevalence of prolonged musculoskeletal sickness absence, and even among office workers carrying out similar occupational tasks, the variation was more than tenfold. Personal risk factors included older age, lower educational level, tendency to somatise, physical loading at work and prolonged absence.
for non-musculoskeletal illness. However, these explained little of the variation between occupational groups. After adjustment for individual characteristics, prolonged musculoskeletal sickness absence was more frequent in groups with greater time pressure at work, lower job control and more adverse beliefs about the work-relatedness of musculoskeletal disorders.

**CONCLUSIONS:** Musculoskeletal sickness absence might be reduced by eliminating excessive time pressures in work, maximising employees' responsibility and control and providing flexibility of duties for those with disabling symptoms. Care should be taken not to overstate work as a cause of musculoskeletal injury.

DOI 10.1136/oemed-2012-101316
Alternate Journal Occup Environ Med
PubMed ID 23695413
PubMed Central ID PMC3710073
Grant List 5 D43 TW05750 / / PHS HHS / United States
5D43 TW00 0644-13 / TW / FIC NIH HHS / United States
5D43 TW00 0644-15 / TW / FIC NIH HHS / United States
MC_U147574248 / / Medical Research Council / United Kingdom
MC_U147585823 / / Medical Research Council / United Kingdom
MC_UP_A620_1018 / / Medical Research Council / United Kingdom