In this issue of *Occupational Medicine*

In the UK the Health & Safety Executive (HSE) estimate that 5m workers are exposed to hand-transmitted vibration (HTV) in the workplace and of these 2m are exposed at levels that put them at risk of developing vibration-related disease [1]. The potentially disabling nature of these disorders has been increasingly recognized and the European Union has published a directive, for implementation by member states, placing limits on acceptable levels of exposure for individual workers. However important areas of uncertainty remain including those disorders likely to be caused by, as opposed to being associated with, HTV; the relative roles of the occupational history and standardized laboratory testing in diagnosis; and the establishment of ‘safe’ levels of HTV exposure. In this issue of *Occupational Medicine* three papers explore different elements of this debate.

Musculoskeletal disorders and symptoms do not form part of the diagnostic criteria, adopted in the UK by the HSE for hand–arm vibration syndrome (HAVS). However, there is a substantial literature on possible associations between vibration and upper limb disorders. House [2] found high levels of upper limb related disability in a cohort of workers with HAVS with the elbow and shoulder musculoskeletal symptoms most disabling and more so than the neurological problems. The difficulty in disentangling the ergonomic demands of the vibratory equipment against the pathological effects of HTV is discussed. The authors emphasize the need to establish whether there is a causal relationship between hand-transmitted vibration and these disabling symptoms but also describe difficulty undertaking such studies within the medicolegal environment surrounding HAVS.

Burström and colleagues [3] undertook a laboratory-based investigation into the impact of different patterns of HTV exposure on temporary impairment of neurological functioning. Although direct extrapolation to the industrial environment is difficult, the study provides evidence that, at least for temporary changes to peripheral sensation, short episodes of repeated vibration exposure compared to sustained similar duration vibration exposure appeared to have less neurological impact. If confirmed this finding might merit changes to current legislation which, at present, is based on daily cumulative HTV exposure. The increasing availability of low-cost personal monitoring equipment and remote downloading of personal vibration exposure to computer equipment means that technical methods to accurately measure sporadic exposure may be around the corner.

The differential diagnosis of aspects of HAVS is very wide. In the paper by Cooke [4] the importance of looking for alternative causes for hand symptoms in workers exposed to HTV is emphasized. The clinical diagnosis of hypothenar hammer syndrome is explored, re-emphasizing the importance of high-quality occupational history taking in clinical occupational medicine practice.

In previous issues we have stated our desire to publish more research based on dissertations submitted for membership of the UK Faculty of Occupational Medicine. It is heartening to see a further example of this in the paper by Batty [5] auditing UK occupational health physicians’ (OHPs) beliefs and interpretations of national data protection and medical confidentiality legislation. In the UK there are many areas of ambiguity in this legislation arising from the unusual status of the occupational physician/employer relationship and the role of occupational physician as provider of an independent opinion or therapeutic intervention. Batty provides well referenced justifications for resolution of a number of clinical dilemmas faced in daily practice by OHPs. The study also suggests there is room for improvement in training for general practitioners with a special interest in occupational health as well as those doctors in specialist training.

Two further epidemiological papers are published this month. Jaakola [6] explores the association between employment as a hairdresser or cosmetologist and adverse birth outcomes, and Alamgir [7] finds a higher incidence of compensable injuries in female health care workers in Canada compared to their male colleagues. Alongside the paper by House [2] these generate further hypotheses of possible causative relationships between occupational exposures and adverse health outcomes. The challenge for the speciality is to establish firm evidence of causation for these suspected hazards to health and robust scientific evidence of the effectiveness of workplace and occupational health interventions. *Occupational Medicine* remains an important international conduit for spreading good occupational health practice and we continue to welcome submission from authors wishing to disseminate their work on causation and intervention.

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References