Unemployment predicts future absence

Unemployment at an early age predicts future sickness absence, according to this large population-based study from Sweden. The study group comprised both immigrants to Sweden (n = 25,607) and a random sample of native Swedes (n = 174,016). All were aged 20–24 in 1992, and the cohort was followed in three five-year periods from 1993 to 2007 using national registry data. Being unemployed in 1992 increased the risk of having at least 60 days' future sickness absence, with the risk increasing with length of unemployment. For example, there was a 15% raised risk of absence in the final five-year period (odds ratio = 1.15; 95% confidence interval 1.10–1.20) for those who had been unemployed for less than 50 days, and a 54% raised risk (OR = 1.54; CI 1.35–1.76) for those who had been unemployed more than 300 days. There were no differences in the measured effects between native Swedes and immigrants, and no consistent differences between men and women.

- *European Journal of Public Health 2013; 23(4): 606–610*
- *http://eurpub.oxfordjournals.org/content/23/4/606.abstract*

Organisational justice improves attendance

A study of 29,180 workers in 2,640 public sector workplaces in Finland (76% female, 21% manual workers) found a clear link between perceived low 'organisational justice' (fairness at work) and sickness absence of more than nine days' duration (as recorded in social insurance registers). Two components of organisational justice – procedural (perceived fairness of the procedures by which decisions are made) and interactional (treatment of employees and communication by management) – as well as job strain were measured using standard self-report scales. During the one-year follow-up, 855 participants (4%) had an absence of more than nine days due to a mental disorder. Those with a higher perception of either procedural or interactional justice had, respectively, a 27% (OR = 0.73) and 24% (OR = 0.76) lower risk of sickness absence due to any mental health disorder (95% CIs 0.66–0.81 and 0.70–0.83) and this remained significant after adjustment for potential confounders, including job strain. Self-perceived procedural and interactional justice were also significantly associated with lower sickness absence specifically from both depressive and anxiety disorders. The only significant association for co-worker-assessed organisational justice and lower risk of absence was between procedural justice and anxiety disorders (OR = 0.60; CI 0.45–0.80). There was only weak evidence that mental health disorders were associated with baseline perceived procedural but not interactional justice; in other words, little evidence for reverse causality.

- *Social Science & Medicine 2013; 91: 39–47*
- *http://www.sciencedirect.com/science/article/pii/S0277953613002827*

Job insecurity – a risk factor for heart disease

A systematic review and meta-analysis – 13 cohort studies covering 174,438 employees (mean follow-up 9.7 years) and 1,892 incident cases of heart disease – finds that perceived job insecurity is a statistically significant, albeit small, risk factor for coronary heart disease (CHD). The raised risk is also is at least partly attributable to a lower socio-economic status and less favourable CHD risk profile in those with job insecurity (for example, they are less likely to be physically active). The age-adjusted relative risk (RR) for high- versus low-job insecurity is 1.32 (95% CI 1.09–1.52); the RR adjusted for socio-demographic and CHD risk factors is 1.19 (CI 1.00–1.42). Age, sex or the type of job insecurity does not modify the association between job insecurity and CHD. The studies were carried out in Scandinavia, Germany, US, UK and Belgium.

- *BMJ 2013; 347: f4746*
- *http://www.bmj.com/content/347/bmj.f4746*

Chronic fatigue recovery

The UK PACE trial was set up to compare treatments for chronic fatigue syndrome (CFS). Previous results have demonstrated that both cognitive behavioural therapy (CBT) and graded exercise therapy (GET) are more effective in reducing both fatigue and physical disability than adaptive pacing therapy (APT – a self-management technique designed to avoid over-exertion). This latest research shows that CBT and GET are both significantly more likely to lead to recovery than APT or specialist medical care (SMC). A total of 640 participants with CFS were randomised to either: SMC alone delivered by specialist CFS doctors; SMC plus APT delivered by occupational therapists; SMC plus CBT delivered by clinical psychologists; and SMC plus GET delivered by physiotherapists. Recovery at 52 weeks was 22% for both GET and CBT, 8% for APT and 7% for SMC. GET and CBT were significantly more likely to lead to recovery when compared to APT – odds ratio for CBT = 3.36 (95% CI 1.64–6.88); for GET = 3.38 (1.65–6.93). There was no significant difference between SMC alone and APT.

- *Psychological Medicine 2013; 43: 2227–2235*
- *http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=8988741&fulltextType=RA&fileId=S0033291713000020*

Trichloroethylene link to NHL

The solvent trichloroethylene (TCE) continues to be used as an industrial degreaser, despite concerns over its safety (it is a class 2A carcinogen). Meta-analyses were carried out for occupational exposure to TCE for five different cancers. The relative risk (RR) for non-Hodgkin's lymphoma due to TCE exposure was 1.21 (95% CI 1.06–1.38) for combined cohort and case–control studies (24 studies included). The risk estimate was higher when restricted to cohort studies of TCE-exposed workers (RR = 1.52; 1.29–1.79) whereas it was non significant for cohort studies of chlorinated solvent-exposed workers, or for case–control studies alone. Meta-analyses did not show significant associations for occupational TCE exposure and Hodgkin's lymphoma (13 studies), multiple myeloma (11), leukaemia (12) or chronic/small lymphocytic leukaemia (7). The study is important because it differentiated between research looking specifically at TCE-exposed workers and those that looked more broadly at chlorinated solvents. 'Reduced TCE-exposure misclassification strengthened the association between exposure and risk,' say the authors.

- *Occupational and Environmental Medicine 2013; 70: 591–599*
- *http://oem.bmj.com/content/early/2013/05/29/oemed-2012-101212.short*

Latex allergy solutions

According to this systematic review of 12 included papers, there is 'strong and consistent evidence' that avoiding powdered natural rubber latex gloves at work reduces both the symptoms and markers of latex sensitisation in workers with latex allergy. It also found limited evidence that healthcare workers with type-1 latex allergy can continue to work without a worsening of symptoms if they use powder-free, low protein latex gloves, provided that either these or non-latex gloves are also supplied to co-workers. There was insufficient evidence to support either the use of personal protective equipment, such as laminar-flow filtered-air helmets or skin protection creams, to prevent occupational latex allergy, or immunotherapy to treat the condition.

- *Occupational Medicine 2013; 63: 395–404*
- *http://occmed.oxfordjournals.org/content/63/6/395.short*

No traction for low back pain cure

This updated Cochrane systematic review of 32 randomised controlled trials involving 2,762 participants finds that traction, either as a single treatment or in combination with physiotherapy, is ineffective in treating low back pain and does not improve return-to-work times, pain intensity, functional status or global improvement (a measure of improvement overall, recovery and subjective improvement in symptoms) when compared to placebo, sham or no treatment. Evidence quality was low to moderate.

- *Cochrane Database of Systematic Reviews 2013; 8: CD003010*
- *http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD003010.pub5/abstract*

Work hardening

The evidence that physical conditioning – also known as work hardening – as part of a return-to-work strategy to reduce sick leave in workers with back pain is inconclusive, according to this updated Cochrane systematic review (41 papers reporting 25 randomised controlled trials, covering 4,404 participants). Physical conditioning simulates or duplicates work or functional tasks in a safe and supervised environment, preparing the injured or disabled worker for a return to work in a structured and graded programme. The number of session and the content of the included studies varied considerably. Risk of bias varied from low (16 studies) to high. There were conflicting results on the effect of physical conditioning compared with usual care or exercise treatment. For workers with acute LBP, there is low quality evidence that neither light nor intensive conditioning have any impact on absence duration compared with usual care. For workers with chronic back pain, there is moderate quality evidence that intense conditioning slightly reduces absence duration compared with usual care, but only at long-term follow-up.

- *Cochrane Database of Systematic Reviews 2013; 8: CD001822*
- *http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD001822.pub3/abstract*

Smoking cessation

Two Cochrane systematic reviews find evidence to support the use of telephone counselling1 (77 controlled included trials, covering over 85,000 participants) and interventions delivered by nurses2 (49 studies, more than 17,000 participants) to help people quit smoking. Both reviews include workplace settings. For smokers contacting helplines (nine studies, 24,000 participants), the meta-

analysis risk ratio (RR) for quitting in those randomised to receive multiple sessions of proactive counselling is 1.37 (95% CI 1.26–1.50). Telephone counselling not initiated by a call to a helpline (51 studies, 30,000 participants) is also effective (RR = 1.27; 95% CI 1.20–1.36) and there is some evidence that more calls leads to a greater chance of quitting. A meta-analysis of 35 studies comprising more than 17,000 participants demonstrates that nurse-led interventions giving advice, counselling and/or quitting strategies, are better than control or usual care in increasing the likelihood of quitting (RR 1.29; 95% CI 1.20–1.39). The evidence is strongest for longer-term structured, rather than brief, interventions and those provided by nurses whose main role is health promotion or smoking cessation, and weakest when delivered as part of a health check.

- *1 Cochrane Database of Systematic Reviews 2013; 8: CD002850*
- *http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD002850.pub3/abstract*

- *2 Cochrane Database of Systematic Reviews 2013; 8: CD001188.*
- *http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD001188.pub4/abstract*

Nursing tasks cause low back pain

A systematic review (89 included papers) concludes that activities involved in nursing increase the risk of, and are associated with, low back pain (LBP) irrespective of nursing technique, personal characteristics, and non work-related factors. Patient handling accounts for much of the excess risk, but other factors, such as the nurse/patient ratio are also important. There is an elevated risk even when assistive lifting devices are used, or when two people rather than one do the lifting. A threshold below which nursing activities do not increase LBP risk cannot be established from current evidence. The reviewers applied the ‘Bradford Hill criteria’ – a set of nine conditions that must be met to establish causation – to the entire body of research evidence and go as far as concluding that work-relatedness should be presumed unless there is evidence to the contrary.

- *International Journal of Occupational and Environmental Health 2013; 19(3): 223–244*
- *http://www.ingentaconnect.com/content/maney/oeh/2013/00000019/00000003/art00009*