

### RTW interventions

Interventions that are carried out early (within the first six weeks) and involving multidisciplinary care teams (eg occupational health, physiotherapy, GP, psychologists) are the most effective in facilitating return to work (RTW) for workers off sick, according to this systematic review. Twenty-three papers of moderate to good methodological quality are included. Interventions that include maintaining contact with the employer/workforce improve RTW rates at 12 months for those with musculoskeletal complaints. Time-contingent interventions that follow a pre-defined schedule – such as a set number of sessions – are effective for physical complaints, but evidence is inconsistent for psychological conditions. So-called activating interventions (eg gradual RTW) are effective for physical conditions. There is no evidence (from three studies) to support the use of interventions targeted at all absent employees, irrespective of diagnosis.

- *Journal of Occupational Rehabilitation* 2012; online first: 10.1007/s10926-012-9359-z.
- <http://www.springerlink.com/content/w77307425m12735v/>

### In pain but in work

Workers who remain at work despite non-specific chronic musculoskeletal pain (CMP) differ in a number of clinically relevant physical and psychological health characteristics compared with workers with CMP who go off sick, according to this Dutch study. Participants with CMP lasting longer than six months and working at least 20 hours a week prior to the study were included – 122 had remained in work and been referred for vocational rehabilitation, and 119 had gone off sick. Workers who remained in work had lower levels of fear avoidance, pain catastrophisation and perceived workload, as well as higher levels of pain acceptance, life control and pain self-efficacy beliefs. There were no differences in physical activity, active coping and work satisfaction between the two groups. Six main factors predict whether an individual is likely to be in the sickness-absence or remaining-at-work group: pain intensity, duration, and acceptance, and perceived workload, mental health and psychological distress.

- *Journal of Occupational Rehabilitation* 2012; online first: doi: 10.1007/s10926-012-9360-6.
- <http://www.springerlink.com/content/w37j74q77761hu64/>

### Safer needles

An important evidence review on the benefits and harms associated with the use of engineering controls to prevent needlestick injuries in healthcare is being undertaken by researchers in Finland, the US and Canada, according to this Cochrane Review protocol. It will include randomised controlled trials, cluster randomised trials and controlled before-and-after studies. Safety-engineered needle devices are among the measures required by the EU sharps and needlestick directive (2010/32/EU) in force from May 2013.

- *Cochrane Database of Systematic Reviews* 2012, issue 4. Art. no.: CD009740. DOI: 10.1002/14651858.CD009740.
- <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD009740/full>

### Hepatitis C prevalence

An evidence synthesis demonstrates that hepatitis C virus (HCV) prevalence remains low in England, with antibody prevalence estimated at 0.67% (95% confidence interval: 0.50%–0.94%) for those aged 15–59 years. The evidence synthesis uses Bayesian modelling to accommodate multiple data sources and incorporates data on non-injectors (ie those who are not injecting drugs)

by ethnic group. Prevalence is high (45%; CI 41–49) among current injecting drug users, and highest among this group in London and the North West. HCV prevalence among never injectors is highest in South Asians (0.76%; CI 0.48–1.23) and lowest among white/other ethnic groups (0.05%; CI 0.03–0.10). Figures are broken down by age, region, ethnic group and injecting drug use.

- *European Journal of Public Health* 2012; online first: doi: 10.1093/eurpub/ckr083.
- <http://eurpub.oxfordjournals.org/content/early/2011/06/25/eurpub.ckr083.abstract>

### **Organisational change**

There is insufficient evidence currently to demonstrate a clear association between organisational change and increased risk of mental ill health. This systematic review includes 17 papers, which focussed on mental health problems (notably depression, anxiety and stress) where organisational change was the primary exposure. Change included downsizing, restructuring, mergers and major changes to job content. Hospital staff and civil servants were the most commonly studied. Associations between organisational change and mental health were found in 11 of the 17 studies. An association was more likely in the cross-sectional rather than longitudinal studies, which might suggest that short-term effects on mental health disappear over time. All four studies on job change found an association with increased mental health problems (one found an association only in men).

- *Occupational & Environmental Medicine* 2012; online first: doi: 10.1136/oemed-2011-100381.
- <http://oem.bmj.com/content/early/2012/04/26/oemed-2011-100381.abstract>

### **Rotator cuff syndrome**

Rotator cuff tendinopathy (also known as subacromial impingement syndrome) is a common cause of shoulder pain. This systematic review looks specifically at the use of exercise interventions in adult patients with symptoms lasting at least three months. Five papers covering four studies met inclusion criteria, all with low risk of bias. Interventions included stretching and/or resistance exercises (using rubber exercise bands). There is moderate evidence: to support the use of exercise compared with no intervention in terms of pain reduction and improved function in the short term; that exercise is beneficial compared with placebo in the short, intermediate and long term; that there is no difference between exercise and surgery in the short, medium and long term; that a home exercise programme is beneficial in the short term compared to no intervention; and that there is no difference between home exercise and the use of either a functional shoulder brace or multimodal physiotherapy.

- *Physiotherapy* 2012; 98: 101–109.
- [http://www.physiotherapyjournal.com/article/S0031-9406\(11\)00453-6/abstract](http://www.physiotherapyjournal.com/article/S0031-9406(11)00453-6/abstract)

### **Does work improve health?**

A systematic review finds a relationship between returning to work and better health – a portion of the relationship is causal, but some relates to selection effects. Studies were controlled, longitudinal and looked at the transition from unemployment to employment. They included both objective and self-reported health outcomes. Eighteen studies are included (three from the UK). Fifteen reported a health benefit from returning to work – either because health improved on employment, or because health declined in continued unemployment. Various studies found that returning to work results in better health ('causation hypothesis') and one particular study found that reemployment reverses the negative health impact of unemployment. Poor health may also

interfere with an individual's ability to return to employment ('selection hypothesis') and two studies support the notion that healthier job seekers are more attractive to employers and more able to cope with the challenge of finding work. Studies examining both hypotheses suggest that selection and causation are mutually reinforcing. There is some evidence that early return to work (within six months) is beneficial in terms of health outcomes.

- *American Journal of Public Health*: March 2012, vol. 102(3): 541–556.
- <http://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2011.300401>

### **Mental health absence**

This study from the Netherlands presents large-scale data on return-to-work (RTW) rates and absence duration of those off sick with different mental health conditions. The probability of a RTW declines at different rates for different conditions. RTW percentages, and sickness absence episodes, duration and incidence were monitored over two years for 51,754 employees (21,146 males, 30,608 females) off sick with a mental health condition. RTW times were longer for women than men, especially for those with emotional disturbance (ICD-10 classification R45), mood disorders (F30–39) and neurotic, somatoform and stress-related disorders (F40–49). Workers younger than 35 years returned to work quicker than workers 55 years and older (especially for R45 and F40–49), though age was not associated with RTW times for mood disorders. One quarter (26%) of all individuals returned within six weeks, 47% within three months, 70% within six months, 87% within 12 months, and 95% within two years. RTW rates were highest for those with emotional disturbance (95% return in one year) and lowest for those with schizophrenia (F20–29 – 59% within 12 months) and adult personality disorders (F60–69 – 53% within 12 months). Probability of RTW was high within the first month for those with R45, and decreased sharply thereafter. RTW was high within the first two months for those with F40–49, and within three months for those with F30–39, decreasing less sharply thereafter. Most absence (94%) was accounted for by ICD categories F40–49, R45 and F30–39.

- *Journal of Occupational Rehabilitation* 2012; online first: doi: 10.1007/s10926-012-9363-3.
- <http://www.springerlink.com/content/v315662353194836/>

### **Chronic fatigue**

A randomised controlled trial involving 222 patients in SE England on primary care interventions to manage chronic fatigue found that symptoms improved significantly after six months, in keeping with previous research. However, there were no significant differences in symptom improvement between either graded exercise therapy (GET) or counselling compared to usual care (which comprised being given a booklet from the GP describing self-help techniques based on cognitive behavioural therapy principles). All patients had consulted their GP with at least three months' fatigue (Chalder fatigue scale score of at least 4). All the intervention groups had significantly improved fatigue scores at six and 12 months ( $p < 0.0004$ ) and lower anxiety and depression scores (Hospital Anxiety and Depression Scale) at six months. Over half the patients in all three groups expressed dissatisfaction with their care at six months; however, significantly more were dissatisfied in the usual-care group at 12 months (65% dissatisfied), compared with the GET (52%) and counselling groups (54%). GPs should reassess patients after six months and discuss further therapy if fatigue symptoms remain.

- *Psychological Medicine* 2012; online first: doi:10.1017/S0033291712000256.
- <http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=8501666&fulltextType=RA&fileId=S0033291712000256>

### Self-reported work-related illness

This systematic review examines the validity of the self-assessment of work-related illness. Thirty-two studies are included, 11 of high evidence quality. Thirteen of the studies were aimed specifically at musculoskeletal disorders, eight covered skin conditions, four respiratory illness, two were on latex allergy and two on hearing problems; the remaining three were general or miscellaneous health issues. Agreement between self-report and expert assessment of work-related illness was low to moderate – the best agreement was for hearing loss. The power of self-reported symptoms to predict expert assessment was variable: sensitivity (correct identification of having the condition) was often moderate to high, but specificity (correct identification of not having the condition) was generally moderate to low. There was better agreement between workers and physicians on the work-relatedness of a condition compared with the non-work-relatedness. Sensitivity and specificity were slightly better for questionnaires on specific symptoms (such as pain, cough, itch) rather than self-diagnosis (ie: ‘Do you have eczema?’).

- *International Archives of Occupational and Environmental Health* 2012; 85: 229–251.
- <http://rd.springer.com/article/10.1007/s00420-011-0662-3?state=cookieless>

### Melatonin levels and nightwork

One postulated mechanism for the increased risk of breast cancer in shift workers is the inhibition of melatonin synthesis by exposure to light during nightwork. This cross-sectional study of 354 female nurses and midwives working rotating night shifts, and 370 working only day shifts, found no difference in the morning levels of urinary 6-sulfatoxymelatonin (MT6) between the two groups. However, women working at least eight night shifts per month recorded significantly lower MT6 concentrations (37.9 ng/mg creatinine, 95% CI 29.8–44.7) than those who had worked between two and seven nights (47.4 ng/mg; CI 44.3–50.6) ( $p = 0.019$ ). MT6 levels were lower in women who worked more than 10 hours during the night compared with those who worked less than 10 hours a night, and higher in women who were able to take naps between 11pm and 3am, but these results were not statistically significant.

- *Occupational & Environmental Medicine* 2012; 69: 339–346.
- <http://oem.bmj.com/content/69/5/339.abstract>

### Healthcare workers' eczema

Self-reported hand eczema is significantly associated with increased hand washing, both at work ( $p < 0.001$ ) and at home ( $p = 0.001$ ), according to this Danish study of 2,269 healthcare workers (HCWs). Hand washing more than 10 times a day was reported by 52% of those with hand eczema, and 43% of those without the condition – despite a recommendation throughout Danish healthcare that HCWs use disinfectants rather than hand washing except when their hands are visibly dirty. Use of disinfectants was, in fact, similar in both groups. Hand eczema prevalence was lower in HCWs using hand moisturisers at work; conversely, those with hand eczema were more likely to use moisturisers at home. Hand eczema was not associated with time spent wearing protective gloves or time spent doing wet work. Having children younger than four years old in the HCW's household was also significantly associated with hand eczema ( $p = 0.002$ ). Self-assessment was based on the Nordic Occupational Skin Questionnaire. The limitation of using self-report data is partly offset by the large number of participants.

- *Contact Dermatitis* 2012; online first: doi :10.1111/j.1600-0536.2011.02027.x.
- <http://onlinelibrary.wiley.com/doi/10.1111/j.1600-0536.2011.02027.x/abstract>