

Long hours raise risk of unhealthy level of drinking

People working long hours are significantly more likely both to consume more alcohol and to become risky drinkers, this meta-analysis of 63 studies reveals. The analysis of cross-sectional studies, which included more than 333,000 participants, finds that those working long hours are 11% more likely to drink more alcohol than those doing standard hours (adjusted odds ratio (OR) = 1.11; 95% confidence interval (CI) 1.05–1.18). The analysis of prospective cohort studies revealed a 12% raised risk of 'new onset risky alcohol use' (OR = 1.12; CI 1.04–1.20) – defined as drinking more than 14 units/week for women and over 21 units/week for men, having been within recommended limits at the start of a study. The associations were independent of age sex, socioeconomic status or geographic region. The increased probability of risky alcohol use remained in an analysis of 18 studies specifically comparing those working more than the 48-hour maximum working week under the Working Time Directive with those doing a standard working week (49–54 hours versus 35–40 hours: OR = 1.13; CI 1.02–1.26).

➤ *BMJ* 2015; 350: g7772. doi: 10.1136/bmj.g7772

➤ www.bmj.com/content/350/bmj.g7772

Work-related sleep problems

An online guided-recovery training programme for workers suffering work-related stress and insomnia significantly reduced sleep problems, according to this randomised controlled trial. The benefits were sustained six months after the intervention. The GET.ON Recovery programme combines various established cognitive behavioural therapy techniques for treating insomnia with interventions to improve physical activity and reduce worrying. It is delivered in six weekly sessions, with homework. In total, 128 schoolteachers were randomised either to the GET.ON programme or a waiting-list control. Insomnia severity score (ISS), was significantly lower in the intervention group ($p < 0.001$) immediately after the intervention and after six months. Mean ISS for the intervention group was 18.0 at baseline, 9.2 after intervention and 8.7 after six months; it was 17.8, 15.6 and 15.2, respectively, for the control group. The intervention group also scored significantly higher for sleep efficiency, restorative sleep, recreational activities and recovery experiences (a measure of psychological detachment from work and relaxation).

➤ *Scandinavian Journal of Work Environment & Health* 2015; 41: 54–64. doi:10.5271/sjweh.3478

➤ http://www.sjweh.fi/show_abstract.php?abstract_id=3478

Home versus workplace for musculoskeletal exercises

The workplace is a more effective environment than the home for carrying out physical exercise to reduce musculoskeletal pain among healthcare workers, this cluster randomised control trial found. Eighteen departments across three Danish hospitals were randomised to two 10-week exercise programmes – comprising five sessions of 10 minutes' strength-training exercises a week – conducted either at work or home. Two hundred female healthcare workers took part. An instructor supervised the workplace exercises. The home group was given training equipment and posters explaining the exercises. Adherence to the training sessions was 45% in the work group and 21% in the home group ($p < 0.001$ for difference). Compared with the home group, the workplace group showed significant improvements in back muscle strength ($p = 0.018$), lower self-rated musculoskeletal pain intensity score ($p < 0.0003$), and reduced use of analgesics ($p = 0.013$). While significant, the improvement in pain intensity score was relatively small.

➤ *Scandinavian Journal of Work Environment & Health* 2015; 41: 153–63. doi: 10.5271/sjweh.3479

➤ http://www.sjweh.fi/show_abstract.php?abstract_id=3479

Menopausal symptoms

This systematic review of 283 studies on menopause therapies finds high-strength evidence that oestrogen is the most effective treatment both for relieving vasomotor symptoms (eg 'hot flushes') and improving quality of life (QoL). There is high-strength evidence that selective serotonin reuptake inhibitors (SSRIs) and serotonin–norepinephrine reuptake inhibitors (SNRIs) also improve vasomotor symptoms and QoL (though to a lesser degree than oestrogen). There is low- to moderate-strength evidence that other non-hormonal treatments (gabapentin, isoflavones, black cohosh) improve vasomotor symptoms. SSRIs/SNRIs and oestrogen are effective in reducing depressive and anxiety symptoms of menopause (high-quality evidence). There is moderate- to high-quality evidence that oestrogen therapy can result in long-term adverse consequences (eg bladder disease and thromboembolic events) as well as benefits (eg reduced risk of osteoporotic fractures). There is low or insufficient evidence on the long-term consequences of non-hormonal therapies.

- *Comparative Effectiveness Review 147. AHRQ no. 15-EHC005-EF. Rockville, USA: Agency for Healthcare Research and Quality, 2015*
- www.effectivehealthcare.ahrq.gov/search-for-guides-reviews-and-reports/?pageaction=displayproduct&productid=2052

MetS not influenced by long working hours

Long working hours do not increase the risk of metabolic syndrome (MetS) – a common disease complex that includes diabetes, dyslipidaemia, obesity and high blood pressure – or any of its components, according to this prospective cohort study of nearly 7,000 university graduates in Spain. Working hours were assessed by an initial (baseline) questionnaire. A total of 409 participants were newly diagnosed with MetS during a mean follow-up of 8.3 years, with a cumulative incidence of 10.4% for men and 3.4% for women. While long working hours (at least 50 hours a week) were associated with MetS in the initial analysis, the link was not significant after controlling for age and sex. The study did not take account of any changes in working hours since the baseline assessment.

- *European Journal of Public Health 2015; online first: doi: 10.1093/eurpub/cku245*
- <http://eurpub.oxfordjournals.org/content/early/2015/02/03/eurpub.cku245>

Moderate activity pays dividends

Efforts to encourage even small increases in physical activity (PA) among inactive individuals can have important health benefits, according to this cohort study of over 334,000 participants in 10 European countries, including the UK. Height, weight and waist circumference (WC) were measured, while PA was assessed using an initial (baseline) self-report questionnaire. Mean follow-up was 12.4 years. There were significant interactions between PA, WC and body mass index (BMI). Almost one-quarter (23%) of participants were categorised as 'inactive' – doing no physical activity and having sedentary jobs. Doing the equivalent of a 20-minute brisk walk every day (90–110 kcal/day energy expenditure) would take the individual from being inactive to 'moderately inactive' and reduce their all-cause mortality (death rate) risk by 20%–30%. Inactive individuals of normal weight (BMI 18.5–24.9) would reduce their all-cause mortality risk even further – by 41% – by becoming active. However, for those with high BMI (30 or more) there would be no further risk reduction in moving from moderately inactive to active. Based on this data, physical inactivity is responsible for twice as many premature deaths as high BMI.

- *American Journal of Clinical Exercise 2015; 101: 613–621. doi: 10.3945/ajcn.114.100065*
- <http://ajcn.nutrition.org/content/early/2015/01/14/ajcn.114.100065.abstract>

Motivating exercise for chronic health conditions

Motivational interventions improve outcomes from prescribed physical activity programmes for people with a variety of health conditions, this systematic review of 14 papers reveals. Studies focused on musculoskeletal pain, low back pain, obesity, cardiac rehabilitation, fatigue in cancer patients and sedentary females. The motivational strategies included cognitive behavioural therapy, motivational interviewing, social cognitive theory, self-determination theory, transtheoretical model of behaviour change and social learning theory. Four studies were rated low quality, the others were of moderate to high quality. Meta-analyses showed that motivational interventions significantly: improved perceived self-efficacy (belief in ability to complete tasks/goals) – standardised mean difference (SMD) = 0.71 (CI 0.55–0.87); and reduced activity limitation (inability to perform a physical task) – SMD = -0.37 (CI -0.65 to -0.08). There was no significant effect on attendance of exercise or physiotherapy sessions.

- *Physiotherapy* 2015; 101: 1–12. doi: 10.1016/j.physio.2014.04.009
- [http://www.physiotherapyjournal.com/article/S0031-9406\(14\)00057-1/abstract](http://www.physiotherapyjournal.com/article/S0031-9406(14)00057-1/abstract)

Recurrent sickness absence due to depression

Work-related stress is a significant risk factor for recurrent sickness absence due to depression, according to this longitudinal cohort study at a major Japanese telecommunications company. The study followed 540 employees (84% male) who had been off sick with a first incident of depression. Cases were followed up from their return-to-work until the date of a recurrent depression-related absence (maximum two-year follow-up). Two hundred employees (37%) had a recurrent absence due to depression. High psychological job demands, as measured on the Brief Job Stress Questionnaire, were significantly predictive of recurrent absence (OR = 1.46; CI 1.01–2.10). Low job control was not predictive of recurrent absence.

- *International Archives of Occupational and Environmental Health* 2015; 88: 75–83.
10.1007/s00420-014-0939-4
- <http://link.springer.com/article/10.1007%2Fs00420-014-0939-4>

HAVS sufferers delay seeking treatment

A study of workers in Canada with occupational hand–arm vibration syndrome (HAVS) found that the mean delay between the onset of symptoms and seeking primary care treatment was 3.5 years, while the average time before referral to an occupational health clinic was nine years. The most common reasons for the delay in seeking care was a belief that the symptoms: were a natural consequence of work or ageing (70%); weren't serious enough (57%); would eventually get better (49%); were not limiting ability to work (49%); and that co-workers had similar symptoms and did not consider them significant (49%). Four in 10 workers thought that 'seeking medical attention would lead to conflict with [the] employer'. If HAVS is not treated early it can become significantly disabling and irreversible.

- *Occupational Medicine* 2015; 65: 154–156. doi: 10.1093/occmed/kqu191
- <http://occmed.oxfordjournals.org/content/65/2/154.abstract>

Occupational and personal factors associated with doctors' burnout

A systematic review of (47 papers) finds higher prevalence of burnout among doctors who are: female; young; work long hours; have low job satisfaction; or experience work–home conflict. However, there is insufficient evidence to establish any causal relationships. Much of the data used in the studies is self-reported.

- *Occupational Medicine* 2015; 65: 117–121. doi: 10.1093/occmed/kqu144
- <http://occmed.oxfordjournals.org/content/65/2/117.abstract>