

### Blunt suture needles

A Cochrane systematic review and meta-analyses finds high-quality evidence that blunt suture needles reduce both glove puncture and actual needlestick injuries. Ten randomised controlled trials – from Europe and the US – comprised a total of 2,961 participating surgeons. Glove perforation occurred once every three operations with sharp needles, and once in every six with blunt needles (relative risk = 0.46; 95% confidence interval 0.38–0.54). Self-reported percutaneous injuries, assessed in four studies, were reduced by 70% (RR = 0.31; CI 0.14–0.68). Blunt needles were generally rated as acceptable, though more difficult to use.

- *Cochrane Database of Systematic Reviews 2011, issue 11. Article no: CD009170*
- <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD009170.pub2/abstract>

### Aspirin: no impact on cancer mortality

A meta-analysis of nine randomised placebo-controlled trials on low-dose aspirin to reduce cardiovascular disease (CVD) risk finds no significant reduction in cancer mortality or cardiovascular deaths in people without prior CVD<sup>1</sup>. Non-fatal myocardial infarction risk is reduced, but bleeding risk is significantly increased. Previous research found that aspirin prophylaxis reduced cancer deaths by 20% overall<sup>2</sup>, leading to suggestions that anyone aged over 45 should take low-dose aspirin routinely.

1 *Archives of Internal Medicine 2012; online first: doi: 10.1001/archinternmed.2011.628.*

- <http://archinte.ama-assn.org/cgi/content/short/archinternmed.2011.628>

2 *Lancet. 2011; 377(9759): 31–41*

- [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(10\)62110-1/abstract](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(10)62110-1/abstract)

### Age and surgical performance

Thyroid surgeons aged 35–50 years (with five to 20 years' experience) have better patient outcomes than older or younger colleagues, according to a prospective cross-sectional study carried out in five academic hospitals in France. It analysed 3,574 thyroidectomies conducted by 28 surgeons over 12 months. Two major complications were assessed: recurrent laryngeal nerve palsy (2.1% prevalence rate) and hypoparathyroidism (2.7%). Surgical experience of 20 years or more was significantly associated with a raised risk of both conditions (odds ratios 3.06 and 7.56, respectively). There was a concave association between hypoparathyroidism and years' experience or age of the surgeon ( $p = 0.036$  and  $p = 0.035$ , respectively).

- *British Medical Journal; 2011; 343: D8041*
- <http://www.bmj.com/content/344/bmj.d8041>

### Unhealthy behaviour in hospital workers

Finnish research finds a 'striking difference' in the prevalence of adverse health risks among psychiatric staff compared with other hospital workers in internal medicine, surgery, obstetrics and gynaecology, paediatrics, and intensive care. The prospective cohort study of 8,000 workers (87% women, 86% nurses) in 21 hospitals, linked baseline health-risk behaviours to absence and medication records over 12 months. Staff in psychiatric wards were more likely to smoke (20% prevalence, compared with 6% in gynaecology) and have excess alcohol consumption, physical inactivity, chronic physical disease and current or past mental health disorders. They were also at significantly raised risk of sickness absence due to all-cause mental disorders and depression.

- *Scandinavian Journal of Work Environment & Health* 2012; online first: doi: 10.5271/sjweh.3264
- [http://www.sjweh.fi/show\\_abstract.php?abstract\\_id=3264](http://www.sjweh.fi/show_abstract.php?abstract_id=3264)

### Common mental health conditions

Workplace disability-prevention interventions can improve outcomes for workers with common mental health conditions, a systematic review finds. Facilitating access to clinical treatment, and employer- or insurer-initiated psychological interventions (primarily CBT) are most effective in improving work functioning and quality of life (moderate evidence). In one high-quality study, providing absent workers with information on disability management options improved return-to-work, but there was only limited or no evidence, respectively, that facilitating treatment or psychological interventions reduced absence duration.

- *Journal of Occupational Rehabilitation* 2012; online first: doi: 10.1007/s10926-011-9338-9
- <http://www.springerlink.com/content/j8580826723k38x5/>

### Weight-loss programmes

A randomised controlled trial of six adult weight-loss programmes (three commercial, three NHS) and a minimal-intervention comparator group finds that a commercial programme (Weight Watchers) is not only the most effective but is also the most cost-effective. All participants (n = 740) had a body mass index above the threshold required for entry into NHS obesity management. Statistically significant weight loss was recorded in each programme, but only two (both commercial) achieved significantly greater weight loss than the comparator at the end of the intervention, and only one after 12 months. Commercial programmes were cheaper (£71–£77 per participant, including administration) than the NHS programmes (£91–113).

- *British Medical Journal* 2011; 343: d6500.
- <http://www.bmj.com/content/343/bmj.d6500>

### Early intervention

A prospective cohort study of public sector employees taking part in Finland's €33 million-a-year vocationally oriented multi-disciplinary rehabilitation (VOMR) programme found no improvements in health or return-to-work times at long-term follow-up (mean 2.8 years). VOMR is aimed at relatively healthy people considered at risk of a deterioration of their work capacity due to work-related physical, mental or social strain. A total of 1,394 participants in the programme were matched to 4,146 controls. There were no differences in mental or physical health disability, or the risk of non-return to work following long-term sick leave.

- *Scandinavian Journal of Work Environment & Health* 2012; 38(1): 27–37.
- [http://www.sjweh.fi/show\\_abstract.php?abstract\\_id=3169](http://www.sjweh.fi/show_abstract.php?abstract_id=3169)

### OSH training

There is strong evidence that occupational safety and health training can improve worker behaviour, but there is insufficient data on its impact on health and injuries, according to a systematic review of 22 papers (six involving healthcare workers). There is insufficient evidence that higher-engagement training (behavioural modelling, hands-on training, simulation) is any more effective than passive, information-based training (lectures, videos). There is a lack of high-quality randomised controlled trials.

- *Scandinavian Journal of Work Environment & Health* 2012; online first: doi: 10.5271/sjweh.3259.
- [http://www.sjweh.fi/show\\_abstract.php?abstract\\_id=3259](http://www.sjweh.fi/show_abstract.php?abstract_id=3259)

### **Flu vaccine uptake**

A meta-analysis of research on seasonal influenza vaccination identifies five non-demographic factors significantly associated with a two-fold or more increase in uptake among healthcare workers: knowledge that the vaccine is effective; being willing to prevent flu transmission; belief that it is highly contagious; belief that prevention is important; and having a family that is usually vaccinated. Men, workers over 40, and physicians are more likely to be vaccinated; being a nurse is negatively associated with vaccine uptake.

- *Occupational and Environmental Medicine* 2012; online first: doi: 10.1136/oemed-2011-100134.
- <http://oem.bmj.com/content/early/2011/12/15/oemed-2011-100134.abstract>

### **Infectious disease job matrix**

A large systematic literature review (242 papers) on occupational exposure to infectious diseases led to the development of occupational-exposure and site-of-entry matrices designed to improve biological hazard identification and risk assessment. Published evidence of infectious disease risk is available for only 31 job titles (International Standard Classification of Occupation), with those working in healthcare, laboratories and animal care associated with the largest numbers of agents.

- *Occupational and Environmental Medicine* 2012; 69: 140–146
- <http://oem.bmj.com/content/69/2/140.abstract>