Training package improves response to domestic violence

Primary care services are often the first port of call for women experiencing domestic violence. The response can be patchy, so researchers designed an intensive package of training and support for primary care practices in the UK, in an attempt to improve case finding and encourage referral to advocacy services.

In a cluster randomised controlled trial, practices that received the package referred substantially more women than control practices to local advocacy services (223 v 12 referrals in one year; adjusted rate ratio 22.1, 95% CI 11.5 to 42.4). The package also improved case finding and recording of domestic violence (641 v 236 records of domestic violence in one year; 3.1 (2.2 to 4.3). Twenty four practices in two UK cities were trained. The 24 control practices were promised training at the end of the trial.

Although the training was fairly brief (two sessions of two hours with an expert from the local advocacy service), it was backed up by regular support, a fast track referral pathway, electronic prompts, a practice champion, and regular feedback to the clinical team. The response looks promising, says a linked comment (doi:10.1016/S0140-6736(11)61390-1), although absolute rates of referral remained low—just 0.3% of the 70000 women in trained practices, and 0.02% of women in control practices.

Did this intervention protect women, reduce violence, or improve health and wellbeing? We don't yet know, and these questions will be difficult and expensive to answer, says the comment. Local commissioners may reasonably decide not to wait.

Lancet 2011; doi:10.1016/S0140-6736(11)61179-3

Encouraging dip in prevalence follows HIV prevention strategy in India

In 2003, the Bill and Melinda Gates Foundation launched an initiative to help prevent HIV in six high prevalence states in India. The initiative targeted sex workers, men who have sex with men, injecting drug users, and truck drivers. It cost $258m (£163m; €186m) between 2003 and 2008, but did it work?

An ecological study, modelling population prevalence from HIV surveillance in antenatal clinics, suggests that the initiative, called Avahan, had a significant impact in three of the six states and prevented an estimated 100 178 infections during its first five years.

The infections supposedly averted by Avahan funding were hard to isolate from background trends in HIV prevalence and from competing funding sources being poured into four of the six states at the same time. But the study’s authors are confident that their $258m prevented at least some HIV infections in some places. They were unable to say precisely how many, and the confidence interval around the overall estimate was wide (95% CI 25 897 to 207 713 infections averted).

We still have a lot to learn about how to evaluate large scale interventions, such as Avahan, says a linked comment (doi:10.1016/S0140-6736(11)61519-5), and this one encountered many problems, despite putting money aside for data gathering. The biggest obstacle was an ethical imperative to roll out the initiative quickly to all districts, leaving no time for prospective evaluation from the start, in addition to investing in controlled trials wherever possible.

JAMA 2011;306:1679-87

Barrett’s oesophagus looks more benign than we thought

In September 2009, doctors at a haemodialysis unit in British Columbia, Canada, noticed an unusually low platelet count in one of their patients. Her platelets fell still further after dialysis. Suspecting a reaction to a new dialyser, doctors investigated and found 19 other patients with similar reactions. The unit had recently switched dialysers to a brand sterilised by electron beam radiation. The first patient had a transplant, and the others changed to different dialysers. None had any further problems.

In May the next year, the whole unit abandoned dialysers sterilised with electron beam radiation, and researchers launched a wider investigation that included all haemodialysis patients in British Columbia and southern Alberta. They found a significant association between dialysers sterilised with electron beam radiation and unexplained thrombocytopenia (adjusted odds ratio 2.52, 95% CI 1.20 to 5.29).

The investigation looks convincing, says a linked editorial (p 1707), and now we need to find out how electron beam sterilisation has this effect on platelets, why it does so in some patients but not others, and whether anyone came to any lasting harm.


Unexplained thrombocytopenia traced to dialysers sterilised with electron beam radiation

Danish researchers have called for a re-evaluation of surveillance guidelines for adults with Barrett’s oesophagus. A population based...
study capturing the entire population of Denmark (5.4 million) suggests that only one in 860 adults with Barrett’s oesophagus will go on to develop oesophageal adenocarcinoma each year. Absolute risks were lower still for women and for anyone without dysplasia on their diagnostic endoscopy (one new adenocarcinoma per 1000 person years).

This latest estimate is almost four times lower than previous estimates used to inform surveillance guidelines, says the researchers. They tracked more than 11 000 adults with Barrett’s oesophagus for five years through comprehensive national databases of pathology reports and cancers.

Barrett’s oesophagus remains a powerful risk factor for cancer, but most cancers arise in patients without this kind of pathology, say the researchers. There is little evidence that endoscopic surveillance reduces mortality for adults without dysplasia, and with absolute risks so low, it might be time to look again at the cost effectiveness of current surveillance protocols. Just 7.6% of all new adenocarcinomas registered in Denmark between 1992 and 2009 were linked to Barrett’s oesophagus.

The clinical relevance of a Barrett’s diagnosis has been on the wane for some years, says a linked editorial (p 1437). Here is more evidence that it is not as dangerous as we thought. N Engl J Med 2011;365:1375-83

Hospital admissions for heart failure fall across the US

Hospital admissions for heart failure in the US fell by just under a third between 1998 and 2008, according to a study of healthcare claims made by adults of 65 or over. Rates of hospital admission among more than 55 million Medicare beneficiaries fell from 2845 per 100 000 person years to 2007 per 100 000 person years during the decade (P<0.001), a relative decline of 29.5%.

Declines in ischaemic heart disease, better control of hypertension, improved secondary prevention, and changes to the threshold for admission are all plausible contributors to the downward trend, say the authors.

Trends in deaths were less impressive. Although one year mortality fell slightly from 31.7% in 1999 to 29.6% in 2008 (P<0.001), survival remains unacceptably poor, says a linked editorial (p 1705). Risk of readmission is another serious problem that shows no sign of improvement. The trends in hospital admission reported here resulted from fewer patients being admitted, not fewer admissions per individual. Doctors managing patients with heart failure should treat acute episodes more aggressively (and consider underused drugs such as digoxin), pay more attention to comorbidities such as hypertension and diabetes, look more carefully for underlying causes of heart failure, and schedule at least one follow-up visit after discharge, says the editorial. JAMA 2011;306:1669-78

Resistant *Escherichia coli* will soon overtake MRSA in European hospitals

In 2007, bloodstream infections caused by meticillin resistant *Staphylococcus aureus* (MRSA) were responsible for an extra 5503 deaths across Europe, according to recent estimates. Bloodstream infections caused by drug resistant *Escherichia coli* were responsible for another 2712 extra deaths. Together, these infections caused death and disease that cost more than £60m (€60m; $83m) that year alone. Drug resistant bacteraemias are a serious burden to public health in Europe and to overstretched healthcare systems say researchers. Although numbers of MRSA infections in European hospitals are declining, infections caused by resistant *E coli* are going rapidly in the opposite direction and will soon overtake MRSA as the leading cause of drug resistant bacteraemia.

The researchers’ main source of data was a surveillance system for antibiotic resistance that captures around half of all acute care hospital admissions in individual countries.

Their analyses suggest that in 2007 the UK and France had the greatest number of extra deaths from MRSA bacteraemias, and the UK and Turkey experienced the greatest number of extra deaths from bacteraemias caused by resistant *E coli*.

If trends continue as they are, both infections will together kill an extra 17 000 people a year across the European region by 2015, they write. PLoS Med 2011;8:e1001104

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