SHORT CUTS

ALL YOU NEED TO READ IN THE OTHER GENERAL JOURNALS

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"Of all the great writers, only Chekhov captures exactly the balance of good and evil in rural life. He worked in a rural hospital, making the best of what support staff he had and what competencies he had acquired as a medical student"

Read Richard Lehman's journal blog at bmj.com/blogs

Researchers blame financial crisis for extra suicides in Europe

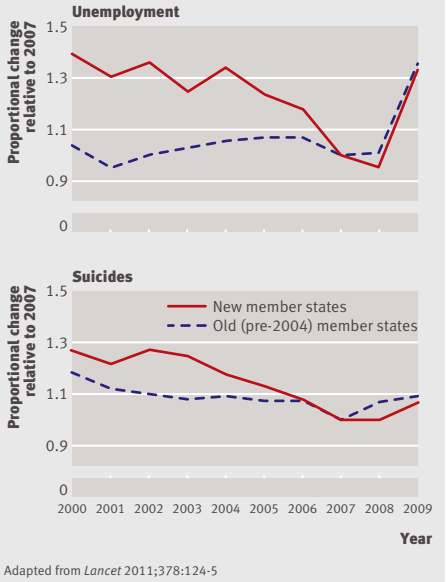
A preliminary look at European national statistics shows a clear increase in suicide rates since the economic downturn in 2008. Countries such as Greece and Ireland that were hardest hit economically saw the biggest increases in suicides (17% and 13%) between 2007 and 2009, the last year for which data are available. Among the 10 member states in the analysis, only Austria bucked the trend. Here, suicide rates fell by around 5% over the same period. It is not yet clear why, although a strong social safety net may have helped, say the study's authors.

Unemployment rose sharply during the economic crisis, and these authors predicted in 2009 that more suicides would follow. They also predicted a drop in road traffic deaths because fewer people could afford to keep a car on the road. The latest figures suggest they were right, although road traffic deaths fell fastest and furthest in newer member states, where death rates had been high before the economic crisis. In Lithuania, fatalities halved between 2007 and 2009.

These authors had complete mortality data for only 10 European member states, and only until 2009. Governments are much better at tracking financial indicators than they are at monitoring the health of their populations, say the authors. These analyses are already two years behind.

Lancet 2011;378:124-5

CHANGES IN ADULT UNEMPLOYMENT AND SUICIDE RATES



Adapted from *Lancet* 2011;378:124-5

Single centre trials report larger treatment effects

Randomised controlled trials have many sources of bias, and by extension so do the meta-analyses that report their combined results. Researchers from France recently added one more—the number of centres that contribute to a trial. They studied individual trials in 48 meta-analyses and found that treatments seemed to work better in single centre trials than in multicentre ones. Single centre trials reported effect sizes that were 27% larger, when averaged across all 48 meta-analyses (ratio of odds ratios 0.73, 95% CI, 0.64 to 0.83). The larger effect sizes associated with single centre trials survived adjustments for sample size (single centre trials are generally smaller) and other sources of bias.

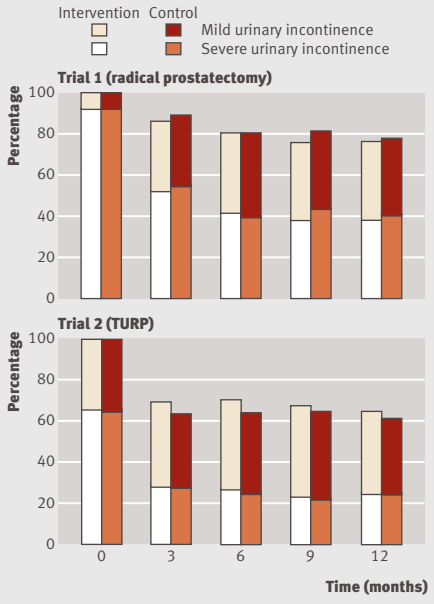
These findings matter, because decisions about treatment and policy depend on accurate estimates from randomised trials and meta-analyses, says a linked editorial (p 61). Here is a new problem that doctors, researchers, guideline developers, and policy makers must grapple with when interpreting evidence. We don't know what is behind it yet, but there are plenty of plausible explanations. Perhaps negative single centre trials are more likely than negative multicentre trials to be left unpublished in filing cabinets. Perhaps they recruit highly selected patients, treated by super specialists, in hospitals with the best equipment. We must find out, says the editorial.

Ann Intern Med 2011;155:39-51

Pelvic floor training sessions fail to improve incontinence after prostate surgery

Incontinence is common after prostate surgery, and pelvic floor exercises are often recommended. One to one training sessions with specialist physiotherapists or nurses encouraged more men to do these exercises, but they had no effect on their symptoms or quality of life, in a matching pair of trials that compared the extra sessions with usual care. One trial recruited men who were incontinent six weeks after a radical prostatectomy for prostate cancer. The other recruited men who were incontinent six weeks after a transurethral resection of the prostate (TURP) for benign disease.

PROPORTION INCONTINENT AND SEVERITY OF INCONTINENCE



Adapted from *Lancet* 2011; doi:10.1016/S0140-6736(11)60751-4

Four one to one sessions over three months worked no better than usual care in either trial. Three quarters of the men in both arms were still incontinent one year after their radical prostatectomy (76% (148/196) *v* 77% (151/195)). More than 60% of the men in both arms were still incontinent one year after TURP (65% (126/194) *v* 62% (125/203)) Both trials were set in the UK, where information and advice about pelvic floor exercises is widely available, from health professionals and elsewhere. The addition of expensive counselling sessions for extra motivation doesn't improve clinical outcomes, and it isn't a good use of the NHS budget, say the authors.

For the prostatectomy trial, the authors approached 1158 men and 472 were eligible. For the TURP trial, they approached 5986, 512 of whom were eligible. The risk of incontinence is high, and treatment remains difficult. These trials tested supervision and counselling, not the exercises, which were available to both control groups through usual care, say the authors.

Lancet 2011; doi:10.1016/S0140-6736(11)60751-4

Massage helps relieve chronic low back pain

A new trial that tested two massage techniques for chronic low back pain reported small but significant improvements in symptoms and function after 10 weeks of treatment. Adults attending weekly massage sessions with trained therapists reported lower symptom scores (1.4 or 1.7 points lower on a scale running from 0 to 10) and lower disability scores (2.5 or 2.9 points lower on a scale running from 0 to 23) than controls given usual care, although the significant differences didn't last long once the sessions had finished.

The authors found little to choose between the two types of massage—one concentrated on relaxation and the other on structural techniques, which are designed to find and treat musculoskeletal contributors to back pain. Relaxation massage is more widely available and slightly cheaper than the more specialised structural massage. Adults considering massage should probably try relaxation massage first, say the authors.

This isn't the first trial to suggest that massage can help some people with chronic back pain, although the size of the benefit is unknown. Masking is always difficult, and controls may report worse symptoms simply because they know they are not receiving the active treatment, say the authors. It is also possible that the benefits associated with massage are more to do with the care, attention, relaxation, and general well-being that accompanies this kind of treatment.

Ann Intern Med 2011;155:1-9

Conflicts between home and work linked to burnout among US physicians

When researchers from one US department of medicine surveyed their academic generalists and specialists for symptoms of burnout, almost a third of respondents reported feeling burned out at least once a week (141/465). Around three quarters said they had felt torn between home and work at least once in the past three weeks (360/465). When conflicts arose, they were usually resolved in favour of work (257/465; 56.6%). Less than 8% of doctors said they had put home life first when they last had to choose (36/465). The survey had an 82.2% response rate (465/566).

In fully adjusted analyses, working long hours (odds ratio 1.02, 95% CI 1.00 to 1.03 for each extra hour a week), a recent conflict between home and work (2.09, 1.10 to 3.97), and resolving that conflict in favour of work (1.88, 1.13 to 3.12) were all independently associated with increased odds of burnout.

These doctors worked at a single academic institution in the US, so it is hard to know what these findings mean for doctors elsewhere. But the associations reported here do look remarkably similar to findings from a much bigger survey of US surgeons, say the authors. Long working hours and imbalance of priorities seem linked to burnout across specialties.

Arch Intern Med 2011;171:1207-9

Nesiritide doesn't work for patients with acute heart failure

The vasodilator nesiritide was approved in 2001 as a treatment for acute heart failure, after a smallish trial suggested that it helped to relieve dyspnoea. Ten years later, after millions of patients have been treated and billions have been spent, a much larger and more definitive trial reports that the drug does not relieve dyspnoea, prevent hospital admission, or save lives.

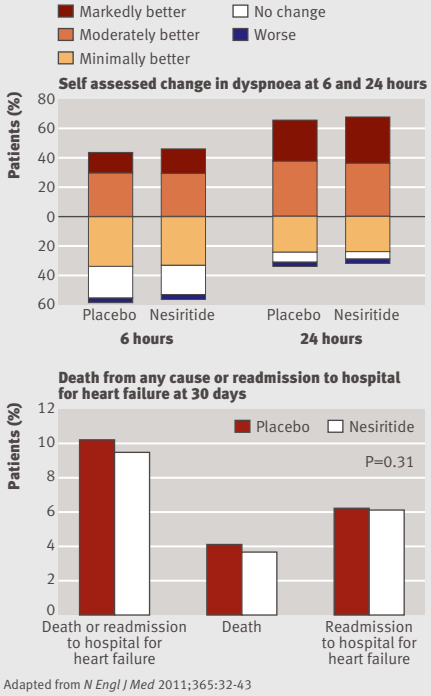
A linked editorial (p 81) asks why it has taken so long to make such an important discovery, and it further questions whether regulators in the US and elsewhere should have approved nesiritide in the first place. Early approval paved the way for aggressive marketing that pushed the drug far from its original (and approved) indication and into outpatient clinics, where nesiritide was used to "tune up" patients with chronic heart failure.

The new trial recruited 7141 patients with acute heart failure admitted to 398 hospitals all over the world. They were given diuretics and other recommended treatments as well as either nesiritide or a placebo infusion. Although nesiritide's marginal effects on dyspnoea were somewhat controversial (the European regulator considers them statistically significant, the US regulator does not), negative results for deaths, hospital readmissions, or both combined were clear cut and took precedence. Nesiritide was associated with significantly more hypotension than the placebo (26.6% (930/3498) *v* 15.3% (538/3509); P<0.001) but no more renal impairment.

Regulators and the manufacturer must share the blame for this decade of evidence-free prescribing, says the editorial. In the future, regulators must have the power to demand definitive trials, preferably before drugs are approved.

N Engl J Med 2011;365:32-43

DYSPNOEA, DEATHS, AND READMISSIONS TO HOSPITAL



Adapted from *N Engl J Med* 2011;365:32-43

Infants with cystic fibrosis don't need diagnostic bronchoalveolar lavage

Infants and young children with cystic fibrosis can't provide sputum, so doctors must rely on oropharyngeal cultures to diagnose *Pseudomonas aeruginosa* infections. The technique isn't particularly sensitive, but a recent trial suggests it is good enough to inform children's management for the first 5 years of life. The trial compared two management protocols for affected babies identified by cystic fibrosis screening at birth—one informed by ad hoc oropharyngeal cultures triggered by symptoms and the other informed by more prescriptive use of bronchoalveolar lavage, which began in the first 6 months of life. Both protocols aimed to diagnose and treat infections early and help prevent structural damage to the lung.

Children managed with bronchoalveolar lavage were no less likely than controls to be infected with *P aeruginosa* at 5 years of age (10% (8/79) *v* 12% (9/76); risk difference −1.7%, 95% confidence interval −11.6% to 8.1%). Bronchoalveolar lavage had no discernible effect on risk of lung injury, lung function, or measures of growth. Coughs got briefly worse after 29% of procedures (151/524). One in 20 procedures caused serious clinical deterioration.

The trial encountered problems with recruitment and with a lower than expected prevalence of infections (the primary outcome), so it was weaker than it might have been and confidence intervals were wider than expected. Still, these authors found no other benefits associated with the more invasive diagnostic technique, and they recommend that it is not used routinely.

JAMA 2011;306:163-71

Cite this as: *BMJ* 2011;343:d4338