SHORT CUTS

ALL YOU NEED TO READ IN THE OTHER GENERAL JOURNALS

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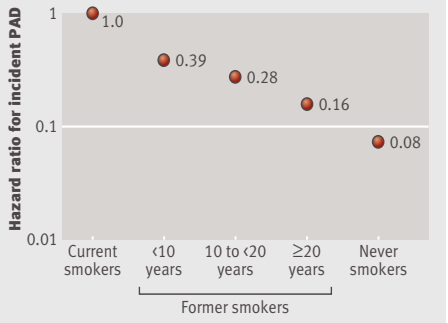
Quitting is good, not starting at all is better

RISK OF PAD WITH INCREASING ABSTINENCE



Adapted from *Ann Intern Med* 2011:154:719-26

Smoking cigarettes increases a woman's risk of symptomatic peripheral artery disease (PAD). The more she smokes, the higher the risk. The longer she smokes, the higher the risk. A large observational study of female US health professionals reports a hazard ratio close to 17 for women smoking 15 or more cigarettes a day compared with non-smokers (16.95, 95% CI 10.77 to 26.67).

Women who quit can expect their risk to fall, but not to disappear, say the authors. In these analyses, women who quit more than 20 years ago were still more likely to develop peripheral artery disease than women who had never smoked.

The study comprised nearly 40 000 middle aged and older women who were healthy when recruited to a randomised trial during the 1990s. One hundred and seventy eight developed symptomatic disease during 12.7 years of follow-up. Smoking was a powerful risk factor with a clear dose response effect, even in fully adjusted analyses. Subclinical inflammation seemed to explain some of the association between smoking and disease. Hazard ratios were lower in analyses that adjusted for serum concentrations of C reactive protein and soluble intercellular adhesion molecule 1 (heavy smokers *v* non-smokers: 9.52, 5.17 to 17.53).

Both women and peripheral artery disease are often overlooked in studies exploring the harm caused by smoking. The authors hope their study will help redress the balance. The findings make it clear that although quitting is good, not starting in the first place is better.

Ann Intern Med 2011;154:719-26

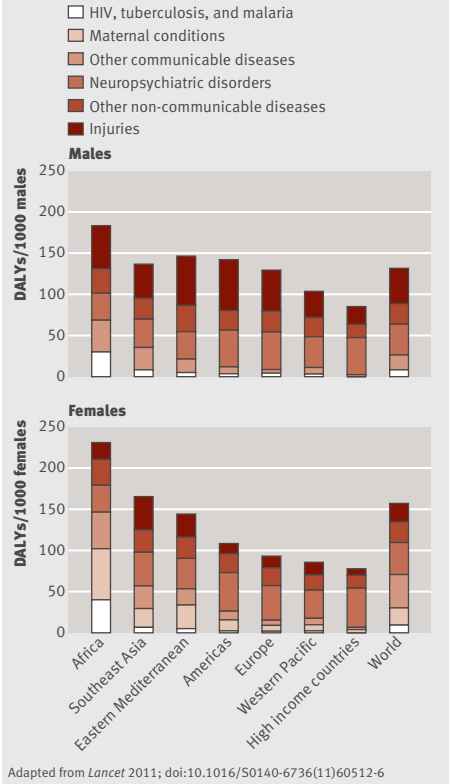
Mental health problems are a leading cause of disability in young people

Adolescents and young adults deserve more attention from global health agencies, say researchers. A sixth (15.5%) of all premature deaths and disability occurs in this age group, mostly as a result of mental health problems (including drug misuse), injuries, and infectious or parasitic diseases.

In a global analysis of disease burden in young people aged 10-24, more than 90% of all years of life lost to death or disability occurred in low and middle income countries, particularly in Africa and South East Asia, where girls and young women lose more years of healthy life than boys and men. The risks of pregnancy and childbirth account for this reversal of the usual imbalance between the sexes, say the authors.

Incident disability—rather than death—dominated the picture in most regions, and neuropsychiatric conditions such as mood disorders and alcohol misuse were the leading causes of disability everywhere, accounting for 45% of healthy years lost globally in this age group. Injuries from violence and road traffic incidents, respiratory diseases (mostly asthma), and infectious or parasitic diseases also featured in the top six causes of disability in most regions.

CAUSES OF DISABILITY ADJUSTED LIFE YEARS (DALY) LOST



Adapted from *Lancet* 2011; doi:10.1016/S0140-6736(11)60512-6

These analyses add an important extra dimension to previous work focusing exclusively on mortality in young people, says a linked comment (doi:10.1016/S0140-6736(11)60618-1). But we mustn't overlook the contribution of behaviours such as smoking. Although patterns of unhealthy behaviour start in this age group, the effects don't feature in global statistics until much later.

Lancet 20111; doi:10.1016/S0140-6736(11)60512-6

Doctors can safely switch to simpler decision rules for suspected pulmonary embolus

The four most popular clinical decision rules are equally good at ruling out a pulmonary embolus when combined with a D-dimer test, according to a prospective study from the Netherlands.

Researchers compared the Wells rule, the revised Geneva score, and newer simpler versions of both in 807 adults presenting to hospital with a suspected pulmonary embolus. All adults had the same work-up, which included all four clinical decision rules and a D-dimer test. Those judged unlikely to have an embolus by all four rules, and with a normal D-dimer test, were sent home with no further investigations or treatment. The rest had a diagnostic computed tomography scan, followed by anticoagulation for confirmed cases.

Researchers tracked all patients for three months, to pick up any emboli missed by the work-up and to compute performance characteristics of the four individual clinical decision rules. There was little to choose between them. When combined with a D-dimer test, all four had negative predictive values above 99%. The simplified scores were as accurate as their more complex forerunners, and the authors say doctors can safely switch to their simplified rule of choice. The simplified revised Geneva score and a D-dimer test, for example, ruled out a pulmonary embolus in 190 patients. Just one had a diagnosis of venous thromboembolism during follow-up (0.5%, 95% CI 0.0% to 2.9%).

Ann Intern Med 2011;154:709-18

"Ovarian cancer almost always presents too late for a cure, so screening asymptomatic women must offer our best chance of reducing its high mortality"
Read Richard Lehman's journal blog at bmj.com/blogs

Intrauterine devices sooner or later after early abortion?

Women having a first trimester abortion by aspiration can opt to have an intrauterine device (IUD) inserted on the same day, if they want ongoing contraception. Or they can opt to come back later for their intrauterine device. Expulsions of the device were slightly more common after early insertion, in a head to head trial from the US, although the difference wasn't significant, and the authors conclude that both options are equally safe. They reported no uterine perforations in either group and a comparably low risk of pelvic infection.

All 258 women assigned to immediate insertion received their IUD. But 95 of the 317 controls (30%) failed to return for theirs within six weeks. Five of these women became pregnant during the six month trial. There were no pregnancies in women given an IUD immediately after an abortion.

This was a non-inferiority trial, so the authors had to set a threshold for the largest clinically acceptable risk difference between early and late insertion of an IUD. They decided that the two options would be equivalent if the absolute difference between them was no more than 8 percentage points. The actual difference in expulsions was just 2.3% (5% (13/258) of same day insertions *v* 2.7% (6/226) of delayed insertions; 95% CI for the absolute difference −1.0% to 5.8%)—well below their threshold.

As expected, follow-up was difficult. Defaults were equally common in both groups. The authors had complete data for only three quarters of participants.

N Engl J Med 2011;364:2208-17

Bariatric surgery may not prolong survival in high risk men

Bariatric surgery causes weight loss and can improve the lives of severely obese adults. The impact of surgery on long term survival is more controversial, with the evidence in favour of surgery being dominated by studies in relatively young, relatively fit women. Surgery did not reduce mortality in a cohort study of predominantly older men from the US, who were compared with carefully matched non-surgical controls. Crude analyses suggested a difference, but it soon shrank then disappeared with increasingly sophisticated adjustments to iron out any selection biases between the two groups (hazard ratio for all cause death over 6.7 years 0.83, 95% CI 0.61 to 1.14).

The men in this study were insured veterans who had gastric bypass surgery in the US between 2000 and 2006. They had a mean age close to 50 and a mean body mass index of 47.4. A third were super obese (263/847), with a body mass index of at least 50. They scored high on an established measure of comorbidity.

Surgical mortality was also high, at 1.3% (11/850), and it is possible that these early deaths contributed to the overall negative result, say the authors. Complex gastric surgery is notoriously difficult in men this big. Simpler procedures such as laparoscopic banding may be safer, although they remain poorly evaluated in this group.

JAMA 2011;305:2419-26

Television is linked to poor health, and a shorter life

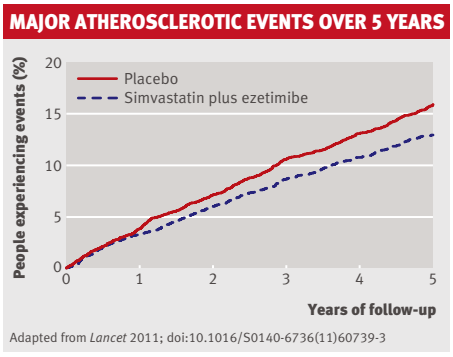
Watching too much television was associated with type 2 diabetes, cardiovascular disease, and even death in a meta-analysis of eight large cohort studies. The risk of diabetes and cardiovascular disease went up steadily with increased viewing time in pooled analyses—20% more type 2 diabetes for every extra two hours a day (relative risk 1.20, 95% CI 1.14 to 1.27) and 15% more cardiovascular disease (1.15, 1.06 to 1.23). Both associations survived adjustments for diet and body mass index, and so did a 13% increase in all cause mortality for every extra two hours of television (1.13, 1.07 to 1.18).

Although these observations can't establish that watching television threatens your life and health directly, they give a strong hint. The studies were big, prospective, and adjusted for multiple risk factors, say the authors. A link between television and poor health is biologically plausible, and there is already evidence from small trials that cutting down on viewing time can at least improve people's lifestyles. Less television may mean less junk food, more exercise, and a lower body mass index.

Bigger trials are needed to find out exactly what happens when adults and children switch off, say the authors. People in developed countries spend between 40% and 50% of their spare time in front of the television. For Americans that's an average of five hours a day.

JAMA 2011;305:2448-55

Cholesterol reduction is worth while for adults with chronic kidney disease



The latest trial to test cholesterol lowering for adults with chronic kidney disease suggests that a low dose of simvastatin combined with the cholesterol absorption inhibitor ezetimibe reduces the risk of atherosclerotic events by 17% compared with a placebo (11.3% *v* 13.4%; rate ratio 0.83, 95% CI 0.74 to 0.94). The combination didn't save any lives, and its main effect was to reduce arterial revascularisation procedures (6.1% *v* 7.6%; 0.79, 0.68 to 0.93) and ischaemic strokes (2.8% *v* 3.8%; 0.75, 0.60 to 0.94). A linked comment (doi:10.1016/S0140-6736(11)60822-2) endorses the findings as clear evidence of benefit, the first so far from a series of four large trials of statins in adults with primary renal disease.

The 9270 participants had chronic kidney disease of varying severity, and a third were on dialysis from the start (mostly haemodialysis). More than 2000 others progressed to end stage renal disease during the trial. Active treatment with simvastatin plus ezetimibe did not prevent or slow progression.

The authors chose this particular combination to maximise benefits and minimise side effects. Patients taking it had no more hepatic, biliary, or muscle pathology than controls taking placebo, and no more cancers. Treatment looks safe, says the linked comment, and doctors could start by giving cholesterol lowering drugs to patients not yet on dialysis. Results for the subgroup on lifelong dialysis at the start of the trial were inconclusive.

Lancet 2011; doi:10.1016/S0140-6736(11)60739-3

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