SHORT CUTS

ALL YOU NEED TO READ IN THE OTHER GENERAL JOURNALS

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Treatment failure is a bigger problem for children with HIV

Children with HIV must take antiretroviral drugs for longer than adults, and running out of treatment options is a serious concern. In one recent study, one in 10 of a cohort of European children no longer responded to all three of the main drug classes after a mean of 4.2 years of treatment (105/1007). Risk of "triple class" treatment failure reached an estimated 12% by five years (95% CI 9.4% to 14.6%). About a quarter of affected children never achieved viral suppression (29/105).

Paediatric HIV is still a neglected disease, says a linked comment (doi:10.1016/S0140-6736(11)60363-2). Many drugs are not licensed for children. Those that are come in unpalatable and hard to administer formulations, if they come in paediatric form at all. Adherence is difficult, which may be one reason why the risk of treatment failure in this study was higher for children than for adults in the same cohorts.

Drug developers, drug regulators, trialists, and international agencies including the World Health Organization could all do more to push for new drugs, better formulations of old ones, and a sharper focus on licensing specifically for children.

Lancet 2011; doi:10.1016/S0140-6736(11)60208-0

Overdose deaths fall after safe injecting facility opens in Vancouver

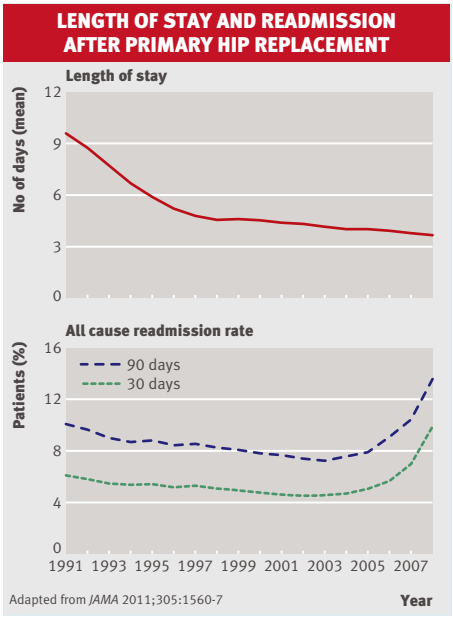
In September 2003, North America's first supervised injecting facility opened in Vancouver, Canada. The facility gave drug users sterile needles and syringes, and a safe place to inject. Accidental deaths from overdose fell by more than a third in the immediate neighbourhood during the first two years of the service, according to an observational study (from 253.8 to 165.1 deaths/100 000 person years; P=0.048). Deaths in the rest of the city decreased by only 9.3% (from 7.6 to 6.9 deaths/100 000 person years; P=0.490).

The authors are confident that supervised injecting saved lives and made a real difference to one of Vancouver's most vulnerable communities. Sophisticated sensitivity analyses added strength to their findings.

Vancouver's supervised injecting facility is currently fighting for its life in Canada's Supreme Court, where conservatives are trying to overturn a lower court ruling allowing it to stay open. A linked comment (10.1016/S0140-6736(11)60132-3) hopes this new evidence will help turn the case in favour of safe injecting sites like this one. Currently, there are around 65 across the globe. The one in Vancouver is a pilot, with only 12 injection seats for a population of 5000 drug users. These services may be morally and politically controversial, says the comment, but they work. More should open, in Vancouver and elsewhere.

Lancet 2011; doi:10.1016/S0140-6736(10)62353-7

Ups and downs during two decades of hip replacements in the US



Every year, 280 000 US adults have a total hip replacement. They are now older, fatter, and more likely to have diabetes, heart failure, and renal failure than they were in 1991, according to an analysis of national insurance data (Medicare). Mortality rates have still fallen, however, particularly after primary operations. By 2008, the risk of dying in the month after surgery was just 0.4% (down from 0.7% in 1991, P<0.001). The risk of dying in hospital was even lower.

Average length of stay after a primary hip replacement has also fallen steadily, from nine days in 1991 to 3.7 in 2008 (P=0.002). But fewer people go straight home, and the proportion discharged to facilities with skilled care, such as rehabilitation centres or nursing homes, is increasing (34.3% in 2008 *v* 17.8% in 1991). The downward trend in hospital stay has also been accompanied by a recent sharp rise in readmissions, say the authors. Reimbursement structures that encourage early discharge at the expense of patient wellbeing should probably be reconsidered.

The trends for revision arthroplasty were broadly similar except for out of hospital mortality rates, which went up slightly but significantly during the study period (30 day mortality: 2.0% in 1991 *v* 2.4% in 2008; P=0.004). Further analysis suggests the increase was largely the result of a riskier case mix.

JAMA 2011;305:1560-7

Runaway prescribing of recombinant factor VIIa in US hospitals

Recombinant factor VIIa is a powerful procoagulant, approved only for people with haemophilia. Off label use has exploded in recent years, and researchers estimate that 97% (95% CI 96% to 98%) of all prescriptions in a selection of US hospitals are now for off label indications, including intracerebral haemorrhage, trauma, cardiac surgery, liver transplantation, and prostatectomy. The same researchers combed the literature for evidence of benefit and found next to nothing. In their review of 16 trials and 48 observational studies, factor VIIa did not save lives when used for any off label indication. It was associated with a significantly increased risk of thromboembolism in patients having cardiac surgery and those with intracranial haemorrhage.

Factor VIIa costs around $10 000 (£6113; €6900) a dose, but off label use in US hospitals increased by a factor of 140 between 2000 and 2008. An editorial (p 566) asks how we can control the runaway use of such an expensive, useless, and potentially dangerous drug.

Firstly, we need to find out why clinical practice has got so far ahead of the evidence so quickly, and in particular whether marketing by the manufacturer had a contributory role. If evidence of unauthorised marketing comes to light "both civil and criminal responses will probably be brought to bear," write the authors. Novo Nordisk denies any such practices. The editorial also urges hospital managers to take a close and critical look at use of factor VIIa in their institutions. Off label prescribing is not illegal, but continuing to prescribe in the face of good evidence that a drug doesn't work (and may harm) could result in civil action.

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Ann Intern Med 2011;154:529-40

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