

OTHER JOURNALS IN BRIEF

A selection of abstracts of clinically relevant papers from other journals. The abstracts on this page have been chosen and edited by John R. Radford.

AND A 'WEEKEND EFFECT'

Increased mortality associated with weekend hospital admission: a case for expanded seven day services?

Freemantle N, Ray D *et al.* *BMJ* 2015; **351**: h4596

Not only is there an increased likelihood of death when patients were admitted on Saturday or Sunday but also when admitted on Friday and Monday.

There is an increased likelihood of death within 30 days of admission, when patients were admitted at the weekend. In addition there was a 'weekend effect' (when patients were admitted on Friday and Monday). The investigators used 'survivorship models' and adjusted for explanatory variables for death by applying for example, the Charlson Comorbidity Index. When patients were already in hospital there was no increased risk of death at weekends. Using improvements in modelling, the results from this study support those published by the same group (*J R Soc Med* 2012; **105**: 74–84) that calculated the much vaunted figure that mortality rates are 16% higher for patients admitted on a Sunday compared with when admitted on a Wednesday (HR = 1.16). But then only 1.8% of patients die within 30 days of admission. These figures have been drilled into by the BBC Radio 4 programme *More or less*.

DOI: 10.1038/sj.bdj.2015.750

GLOBAL BURDEN OF DISEASE

Global, regional, and national comparative risk assessment of 79 behavioural, environmental and occupational, and metabolic risks or clusters of risks in 188 countries, 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013

GBD 2013 Risk Factors Collaborators. www.thelancet.com 2015; [http://dx.doi.org/10.1016/S0140-6736\(15\)00128-2](http://dx.doi.org/10.1016/S0140-6736(15)00128-2)

'The challenge for governments and the health development community more broadly is to heed this knowledge about the comparative effect of health risks...'

This is the first of a series of annual updates of The Global Burden of Disease, Injuries, and Risk Factor study 2013, whose foundations were laid from 1990–2010. For 79 risks or cluster of risks, among other outcomes, attributable deaths and disability-adjusted life-years (DALYs) were estimated. Risks were categorised into behavioural, environmental and occupational, and metabolic. Since 2010 six new risk factors have been included for example handwashing practices, occupational exposure to trichloroethylene and unsafe sex. The risks identified accounted for 57.2% of deaths and 41.6% of DALYs. In high-income countries, leading risk factors for women are an increased BMI and raised systolic blood pressure. For men from high-income countries, it is again a raised systolic blood pressure and tobacco use. Air pollution was linked to 5.5 million deaths and 141.5 million DALYs. There were some data on occupational exposure to diesel engine exhaust.

DOI: 10.1038/sj.bdj.2015.751

ANTIBIOTIC STEWARDSHIP – LEGISLATION

'California is the only state with formal state-wide legislation that supports antimicrobial stewardship.'

Morrill HJ, LaPlante KL. *Lancet Infect Dis* 2015; **26**: 377–378

The challenge for governments and the health development community... about the comparative effect of health risks...'

It has been reported (*Lancet Infect Dis* 2014; **14**: 742–750), that there has been a 36% increase in the use of antibiotics worldwide. Over three quarters are used in BRICS (five major emerging national economies namely Brazil, Russia, India, China and South Africa). Irrespective of the healthcare setting, 50% of antimicrobials are used inappropriately. This particularly applies to animal husbandry (see an accompanying letter published in this edition of that journal). In a recent NICE Guideline (Antimicrobial stewardship: systems and processes for effective antimicrobial medicine use – nice.org.uk/guidance/ng15), prescribers should demonstrate 'via continuing professional development (CPD)/revalidation that they are following the principles of antimicrobial stewardship'. Are there parallels with other legislations? In May 2011, the Rhode Island Antimicrobial Stewardship Task Force adopted the following approach including monthly leader-facilitated meetings examining treatment pathways, guidelines, policies underpinned by educational material and the sharing of ideas and experiences.

DOI: 10.1038/sj.bdj.2015.752

ALZHEIMER'S DISEASE

Alzheimer's fear in hormone patients. Brain plaques may have been seeded by growth therapy.

Abbot A. *Nature* 2015; **525**: 165

'A β seeds are known, like prions, to adhere to metal surfaces and to resist... conventional hospital sterilisation.'

This NEWS IN FOCUS, comments on the substantive report (LETTER) published in the same edition of the journal (*Nature* 2015; **525**: 247–250). It has been suggested that Alzheimer's disease could be triggered by misfolding of the peptide amyloid- β from small amyloid- β 'seeds'. Thirty thousand children received human growth hormone, pooled from thousands of cadavers, from 1958 until 1985. Some of these products were contaminated with CJD prions, resulting tragically in over 200 deaths. In the study, the investigators found that in eight patients who died of iatrogenic CJD, four (different numbers reported in press releases) showed 'moderate to severe grey matter and vascular amyloid- β (A β) pathology'. In the LETTER, the investigators state there is little to suggest that Alzheimer's disease is contagious or transmissible. Notwithstanding this, they raise the following note of caution; 'our findings should prompt consideration of whether other known iatrogenic routes of prion transmission, including surgical instruments and blood products, may also be relevant to A β and other proteopathic seeds seen in neurodegenerative diseases.'

DOI: 10.1038/sj.bdj.2015.753