SHORT CUTS

ALL YOU NEED TO READ IN THE OTHER GENERAL JOURNALS

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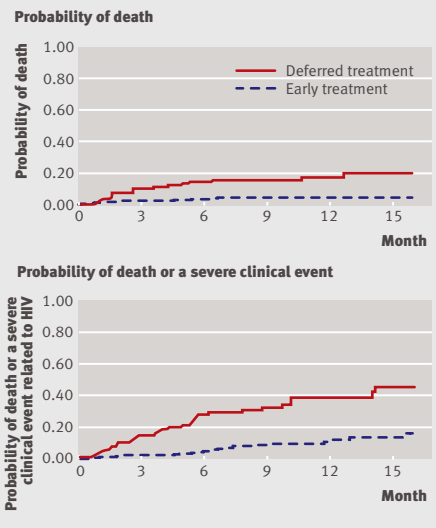
Early treatment is life saving for babies with HIV

New babies with HIV should start treatment sooner rather than later, says an international team of researchers based in South Africa, after their trial found that an earlier treatment strategy could save lives. Babies with HIV in the first weeks of life started treatment with lopinavir-ritonavir, zidovudine, and lamivudine either immediately or guided by a falling CD4 percentage or clinical criteria. Immediate treatment at a median age of 7.4 weeks was associated with a 76% decrease in deaths, compared with deferred treatment (16% (20/125) *v* 4% (10/252); P<0.001) and a 75% decrease in the risk of disease progression (25.6% (32/125) *v* 6.3% (16/252); P<0.001). Most of the excess deaths were rapid and unexpected, often from gastroenteritis or pneumonia. Fifteen infants in the deferred treatment group died before receiving any treatment—three quarters of all deaths in that group. South Africa's data and safety monitoring board modified the deferred treatment option when these results emerged after a median follow-up of 40 weeks.

All the infants in this trial became HIV positive, despite attempts to prevent transmission from mother to child by giving the mother antiretroviral drugs. All had a CD4 percentage of at least 25% when recruited. International guidelines recommend treatment guided by CD4 percentage and clinical criteria. The recommended strategy failed to work for these babies.
N Engl J Med 2008;359:2233-44

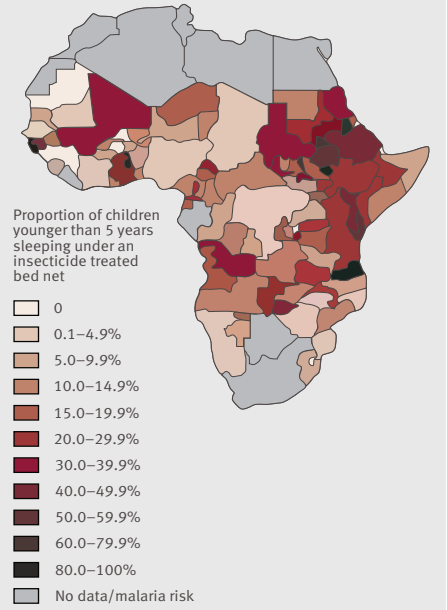
PROBABILITY OF DEATH OR A SEVERE CLINICAL EVENT RELATED TO HIV



Adapted from *N Engl J Med* 2008;359:2233-44

Slow progress with bed nets hampers malaria control

PROJECTED BED NET COVERAGE (JULY 2007) IN CHILDREN UNDER 5



Adapted from *Lancet* 2008 doi: 10.1016/S0140-6736(08)61596-2

Bed nets treated with insecticide are one of the best ways to protect children from malaria in endemic parts of Africa. Distribution across the continent has been slow, however, with almost 90 million children under 5 years still without them. Recent estimates suggest that although coverage increased from 1.8% to 18.5% between 2000 and 2007, 89.6 million children remain unprotected and at risk from falciparum malaria. Researchers estimated coverage from local and national surveys in 40 countries and projected likely coverage for 2007.

Their study suggests that more than half of the children without bed nets (48.3/89.6 million, 54%) live in seven countries—Nigeria, Democratic Republic of Congo, Uganda, Sudan, Mozambique, Côte d'Ivoire, and Cameroon—where coverage was less than 15% in 2007. International efforts to control malaria should focus on these countries first, say researchers. About a quarter of unprotected children live in Nigeria alone.

Experts are still debating how best to get bed nets to those who need them most. In this study, countries that gave away free bed nets seemed to make better progress than those relying on full cost recovery schemes or routine subsidies from the public sector.
Lancet 2008 doi:10.1016/S0140-6736(08)61596-2

Length of life without disability varies widely across Europe

In 2005, a 50 year old man living in Europe could expect to enjoy another 17.3 years of life without disability, according to a recent study. The corresponding figure for women was 18.1 years. But these averages conceal wide variations among the 25 countries of the European Union. Women in Denmark, for example could expect 24.1 healthy years of life beyond 50, whereas women in Estonia could expect just 10.4. The 14 year variation in healthy life years was wider than the variation in overall life expectancy, which implies that some countries will struggle more than others to keep their older people in work, say the authors. European strategists have set a target of 50% employment for people aged 55-64 by 2010. Healthy life years became an official health indicator in 2004.

In general, people living in the 15 more established countries of the EU had longer, healthier lives than people living in the 10 more recent member states. Higher national wealth (as measured by gross domestic product) and higher spending on care for older people were associated with a longer disability free life for both sexes. In men, expected years of healthy life after 50 was negatively associated with long term unemployment.
Lancet 2008 doi:10.1016/S0140-6736(08)61594-9

Intensive psychotherapy improves diabetic control, but not much

Poor control of diabetes can be psychological as well as physical, so researchers designed a randomised trial to find out if the combination of motivational therapy and cognitive behavioural therapy might help adults with a long history of badly controlled type 1 diabetes. The effects were modest. Four sessions of motivational enhancement therapy over two

months, followed by eight sessions of cognitive behavioural therapy over four months reduced glycated haemoglobin by a small but significant 0.46% (95% CI 0.81% to 0.11%) compared with usual care. Four sessions of motivational therapy alone had no effect on diabetic control, and even the combined treatment made no difference to half a dozen secondary outcome measures, including body mass index, depression, and quality of life.

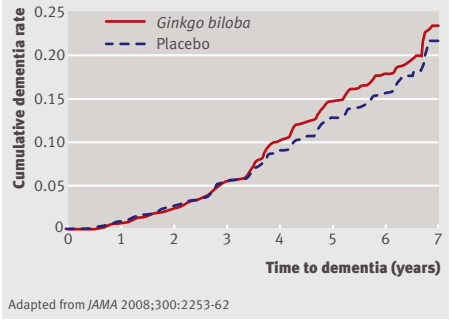
The authors think the combined psychotherapy could still be useful, although it is unclear whether it worked simply because participants in this group had so much more attention from professionals than usual care controls or those given motivational therapy alone. Further work will have to tease out which elements of the process had the desired effect.

Specially trained nurses delivered both types of psychotherapy in this study, which investigated 344 adults with an average glycated haemoglobin of 9.4% at baseline. The small improvements associated with combined therapy became significant at 12 months, six months after the treatment finished.

Ann Intern Med 2008;149:708-19

Ginkgo biloba does not prevent dementia

CUMULATIVE DEMENTIA RATES BY TREATMENT



Adapted from *JAMA* 2008;300:2253-62

After 20 years of research, it is now clearer than ever that the popular supplement *Ginkgo biloba* does not prevent dementia. People who take it to preserve cognitive function in old age should not expect it to work, says an editorial (p 2253). Nor should they expect it to be harmless, after the latest trial found an excess of dementia in people with cardiovascular disease who took the supplement long term.

Extract of *G biloba*, sales of which are worth $249m (£167m; €199m) a year in the US alone, has failed to match expectations based on the basic science of its unique constituents—flavonoids and ginkgolides that look neuroprotective in the laboratory.

The new trial included more than 3000 US adults aged 75 or over. They had no dementia when recruited, and *G biloba* 120 mg twice a day did not stop them developing it (hazard ratio for all cause dementia 1.12, 95% CI 0.94 to 1.33 compared with placebo). The extract did not prevent dementia in the minority of participants with mild cognitive impairment. It seemed to increase the risk in a subgroup of patients with cardiovascular disease (1.56, 1.14 to 2.15).

This trial is the biggest and best so far, says the editorial. It is also the longest. Participants took their assigned pills for a mean of six years.

JAMA 2008;300:2253-62

Inhaled corticosteroids don't reduce mortality in stable COPD

Like most drug treatments for chronic obstructive pulmonary disease (COPD), inhaled corticosteroids are better at symptom control and preventing exacerbations than they are at saving lives. The latest meta-analysis to look specifically at mortality found that long term inhaled steroids made no difference to survival for people with stable disease but did increase the risk of pneumonia.

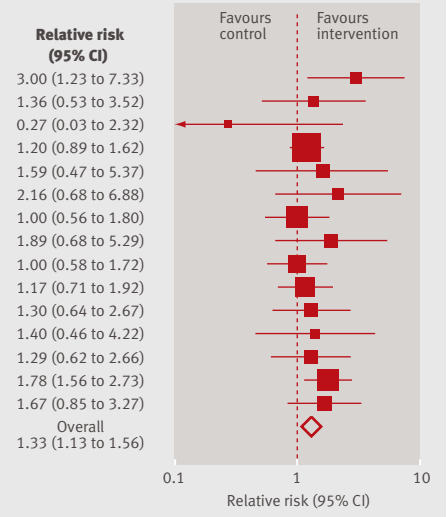
The authors found 11 randomised trials evaluating fluticasone, triamcinolone, and budesonide, alone or in combination with other inhaled drugs, usually salmeterol. The trials tested treatments that lasted at least six months and studied more than 14 000 adults between them. Relative risk of death was 0.86 (95% CI 0.68 to 1.09) in patients treated with inhaled steroids, compared with controls given placebo or other inhaled drugs. Subgroup analyses looking at the effect of duration of treatment, type of product (monotherapy or combined), severity of disease, and dose were all negative. Inhaled corticosteroids were associated with a significant 34% increase in the risk of pneumonia (1.34, 1.03 to 1.75), but no extra fractures (1.09, 0.89 to 1.33).

Because this treatment seems to have no effect on mortality, doctors must weigh up the other risks (pneumonia) and benefits (fewer exacerbations, improved quality of life) when making therapeutic decisions in patients with stable chronic obstructive pulmonary disease, say the authors. As usual, the balance will vary between different subgroups. In this analysis, risk of pneumonia was highest in patients with the poorest lung function, those given higher doses, and those treated with combined products. Doctors who decide to prescribe inhaled steroids should use the lowest effective dose, say the authors.

JAMA 2008;300:2407-16

Anticancer agent increases risk of venous thromboembolism

RELATIVE RISK OF VENOUS THROMBOEMBOLISM IN 15 TRIALS



Adapted from *JAMA* 2008;300:2277-85

Bevacizumab is a monoclonal antibody used in the treatment of some metastatic cancers. It inhibits angiogenesis and has well known serious side effects, including arterial thromboembolism. Suspecting that bevacizumab could also be associated with venous thromboembolism, researchers did a systematic review and meta-analysis of 15 randomised controlled trials.

Participants treated with the new agent in addition to standard chemotherapy were 29-38% more likely to develop venous thrombosis than controls (relative risk 1.29, 95% CI 1.03 to 1.63 for all grades, and 1.38, 1.12 to 1.70 for high grade thromboses). Participants had lung cancer, colorectal cancer, breast cancer, pancreatic cancer, or renal cell carcinoma. Absolute rates of venous thromboembolism were highest in patients with colorectal cancer treated with bevacizumab (19.1% (108/564), 16.1% to 22.6%).

Higher and low doses of bevacizumab were associated with similar risks in this study. Patients and their doctors should be aware of the link and be vigilant, say the authors. There may even be a place for warnings on the package insert. Other agents that inhibit angiogenesis, such as thalidomide and lenalidomide, are also associated with venous thromboembolism. Combinations of these antineoplastic treatments, including bevacizumab, are already under evaluation, and may be particularly risky, say the review's authors.

JAMA 2008;300:2277-85

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