Intensive care patients should be given prophylactic antibiotics

Tony Sheldon *Utrecht*

Hospital deaths among patients in intensive care units could be cut by a quarter if patients were given a cocktail of prophylactic antibiotics, a large randomised controlled study in the Netherlands has said (*Lancet* 2003;362:1011-6).

Amsterdam's Academic Medical Centre, which carried out the study, believes it has put the treatment back on the agenda by showing an "impressive reduction" in mortality in longer stay intensive care patients. It also shows that the rates of colonisation by resistant bacteria are lower and the stays in intensive care shorter. Giving intensive care patients antibiotics prophylactically resulted in an overall drop in the cost of antibiotics of more than 10%.

The medical centre argues that restricting antibiotic use because

of the dangers of growing resistance may not always be correct.

The arguments for using prophylactic antibiotics with intensive care patients has a controversial 20 year history in the Netherlands, where the practice has been described as "like swearing in church." Figures from the European Surveillance of Antimicrobial Consumption (an international network of surveillance systems) show that in 2001, Dutch hospitals were among the lowest consumers of antibiotics by volume in Europe. French hospitals consumed more than double the Dutch hospitals.

In 1984, Chris Stoutenbeek, who was professor in intensive care and head of the centre's intensive care department (but who has since died), developed the selective decontamination of the digestive tract. He argued that intensive care patients ran a risk of dying from hospital infections, mostly preceded by pathogenic micro-organisms colonising the throat, stomach, and gut. A combination of antibiotics could kill these potentially dangerous aerobic bacteria while leaving undisturbed the normally present anaerobic intestinal bacteria that protect against potential infection.

Between 1999 and 2001 the centre selected a group of more

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Advocating the use of prophylactic antibiotics in intensive care has been described as like "swearing in church"

than 900 intensive care patients who were expected either to be on ventilation for at least two days or to remain in intensive care for at least three. Half were given normal treatment, the other half four antibiotics (polymyxin E, tobramycin, amphotericin B, and cefotaxime).

Intensive care death rates among patients given prophylactic antibiotics were 15% (69/466) compared with 23% (107/468) among the control group ($P=0.002$). During the whole hospital stay, deaths were 24% (113) and 31% (146) respectively

($P=0.02$). The study also found unexpectedly lower rates of infection with antibiotic resistant bacteria—16% (61/378) *v* 26% (104/395) ($P=0.001$). Average stays in intensive care were also shorter (6.8 days *v* 8.5 days).

Dr Evert de Jonge from the hospital's intensive care department, who led the research, said it shows an "impressive reduction in mortality" in a Dutch setting where there are very low levels of vancomycin-resistant enterococcus and methicillin resistant *Staphylococcus aureus* (MRSA). □

Long term care will "implode" unless personal care comes free

Katherine Burke *London*

The long term care situation across the United Kingdom will "implode," unless the rest of the United Kingdom follows Scotland's lead and funds personal care for sick and disabled people, official advisers have warned.

Nine of the original 12 royal commissioners on long term care for the elderly have called on the English, Welsh, and Northern Irish governments to scrap the "artificial" distinction between nursing and the intimate help some patients need with dressing, washing, eating, or managing their continence.

Since July 2002, elderly people in Scotland have been getting the personal and nursing care they need free of charge (*BMJ* 2002;324:1542), whereas in the rest of the United Kingdom those with assets

of more than £12 000 (\$20 000; €17 260) have to pay a proportion of the costs, rising to 100% for those with assets of £19 500.

Administering such means testing costs money, the group pointed out in a 50 paragraph statement on 29 September. They estimate that providing personal care to anybody who needed it would cost a "modest" £1.1bn a year across the United Kingdom—substantially less than the £2bn that Whitehall has already committed to long term care.

Some patients manage to get their personal care on the NHS because a district nurse delivers it, but the rest must pay privately for the same care from a health-care assistant—a discrepancy that raises "huge ethical, conceptual and practical difficulties," say the

commissioners. The difficulties were pointed out in their original report nearly five years ago (March 1999).

The rules on care funding mean that patients with dementia get a raw deal, according to commissioner Dr Iona Heath, a GP in north London and chair of ethics for the Royal College of General Practitioners.

"It's a disease process, and yet the people who've got it [dementia] are told they need social care—there doesn't seem to be any justice in it," Dr Heath told the *BMJ*.

"People lose their dignity and hope because once they sell their house they can no longer go back to it. The predicament of people with Alzheimer's is truly dreadful. Then to be expected to use all your savings to pay for care."

The group is so concerned about the plight of people requiring long term care that it has continued to meet voluntarily four times a year for the past four years to monitor

implementation of its proposals.

Speaking on the BBC's *Today* programme, the chairman of the committee, Professor Stewart Sutherland, said: "Care need is not the fault of the individual and should be treated in the same way as heart conditions and cancer."

The Royal College of General Practitioners has backed the campaign for free personal care. However, the Department of Health has emphasised that only three in 10 older people pay the full cost of their personal care and that free care for all would "only ever benefit the better off."

"We could spend the additional £1.4bn the government is making available annually for improvements in service delivery on giving people free personal care, but we would buy not a single extra bed, not a single extra service, nor a single break for a family carer," said a Department of Health press statement. □

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