

Conference briefing

The economic evaluation of antidepressant therapy

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A conference on this subject was held at Redworth Hall, County Durham, on 2 May 1992 under the sponsorship of E. Merck Pharmaceuticals. It was reported that though much depression still goes unrecognised, UK general practitioners diagnose 2 million cases each year; the College's Defeat Depression Campaign is attempting to confront what is now acknowledged to be a major public health problem. While minor depression will often respond to psychological treatments and social measures alone, antidepressants are required in more severe cases, particularly in the presence of biological symptoms, agitation, guilt and hopelessness.

Since imipramine and MAOIs were discovered in the late 1950s, research has failed to produce a drug which is clearly superior in efficacy or in rapidity of action, so that the emphasis has been on reducing side-effects and toxicity in overdose. However, 2.5% of the total NHS budget is spent on antidepressants and it should no longer be assumed that we can afford to pay for newer and increasingly expensive drugs.

At the simplest level, if 1 million prescriptions of drug A at £3 each are associated with 50 fatal poisonings and drug B at £33 with no fatalities, each life saved costs £600,000. Given this information, purchasers may prefer to invest the extra £30 million in some other area of health care where lives can be 'bought' more cheaply. However, to allow such choices to be made in an informed way, more detailed information is required on costs and outcomes. Of most use to service purchasers in this respect is the cost-utility analysis. Utility is enhancements in length and quality of life of patients and their carers and is measured in Quality Adjusted Life Years (QALYs), but is difficult both to measure and to weigh against financial costs.

As well as reducing utility, side-effects increase costs as, for example, when drug-induced hypotension leads to a fractured hip, dental decay arises from some drugs, non-compliance lengthens treatment of depression, or otherwise preventable overdoses need treating. Drop-out rates in studies due to side-effects were quoted as: sertraline (28%), imipramine, fluvoxamine and fluoxetine (all 20%), paroxetine (13%), and lofepramine (7%).

The more toxic an antidepressant, the higher the number of suicides (depression accounts for about 60%) and the greater the cost of treatment following an overdose. When selecting an antidepressant, the *Fatal Toxicity Index* (deaths from a drug overdose per million prescriptions) has been used as a method of comparing toxicity. The cardiac toxicity of an antidepressant is largely related to its membrane-stabilising effect, something that mianserin, the selective serotonin reuptake inhibitors and viloxazine do not exhibit.

With rising levels of litigation, it is possible that doctors might be held liable for adverse drug reactions and suicides. To be guilty of malpractice, though, a doctor must fail in his duty of care, in that his conduct did not conform to the appropriate standard of care (determined by what most competent practitioners do), and thus caused injury to the patient. However, it is not clear at present what the outcome of such an action would be in relation to death from an overdose of an antidepressant.

Speakers were Dr George Beaumont of Medical & Pharmaceutical Advisory Services, Stockport, Dr John Cookson, Professor Donald Eccleston, Professor Robert Daly, Professor Ian Ferrier, Professor Paul Freeling, Dr John Henry, Consultant Physician at Guy's Hospital Poisons Unit, and Professor Alan Maynard, Director of the Centre for Health Economics at the University of York.