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Promoting rational therapeutics: the Swedish guidelines and a UK response

BEHIND the many recent articles on practice formularies¹⁻⁵ lurks a disturbing but fundamental question: 'How much does a general practitioner need to know about the drugs he or she prescribes?' The problem underlying this question is that, while purely clinical knowledge has increased significantly in the past 25 years, 'hard' scientific knowledge of clinical pharmacology and cellular function has probably increased four-fold, or thereabouts, in the same quarter of a century. Even a full-time pharmacologist can hardly aspire to comprehensive knowledge of clinical pharmacology today, so what hope is there for the busy family doctor? Given the sheer range of modern drugs (1119 chemical entities, 1184 official generic names, and 3616 branded products with licence numbers; Royal Pharmaceutical Society of Great Britain, personal communication), what strategies should we be adopting to keep our prescribing rational and safe? Rational prescribing is difficult to achieve and maintain,^{6,7} and it is unlikely to be attained by the individual doctor without an adequate knowledge of modern drug science. But what is an 'adequate knowledge'?

Swedish general practitioners⁸ addressed this problem nationally in 1986 and developed guidelines for the continuing education of general practitioners about drugs. This was an amicable consensus, reached by a working party representing the General Practitioners' Union, the Medically Qualified Pharmacologists' Union, the National Pharmaceutical Union, the Federation of Swedish County Councils and the Department of Health and Welfare.

The aim of the guidelines is to promote rational therapeutics, including drug and other treatment. The scheme is very simple and so apparently obvious as not to sound at all like the revolutionary approach it embodies. For competence, the modern family doctor requires the following knowledge about the drugs he or she prescribes:

General clinical pharmacology — the principles which apply to drugs in general. These include routes of administration, absorption, distribution, mechanisms of action and elimination of drugs, modern receptor theory, factors which cause the normal variation in response, adverse drug reactions, drug interactions, effects of reduced hepatic and renal function, pregnancy, old age, toxic dosage, and so on. It is arguably well within the intellectual capacity of most family doctors to assimilate this complex background knowledge which is the foundation of rational prescribing.

Specific clinical pharmacology — the relevant scientific information required for the safe and effective prescribing of particular drugs. Since it is clearly impossible to achieve this level of knowledge for all drugs, it is envisaged that a doctor or partnership should allocate each drug to one of three levels of knowledge: very detailed knowledge of drugs used to treat the everyday symptoms and disorders dominating primary care (about 50 drugs); competent familiarity with drugs used to treat less common conditions (about 150 drugs); limited knowledge of all other drugs, such that the relevant source (for example the *British national formulary*) should be studied before the drug is prescribed.

Dealing specifically with the 50 drugs commonly used in general practice, the Swedish guidelines recommend that we should maintain our present levels of knowledge of drug names, presentations, dosages, important side effects, interactions, contraindications and the drug in the context of the disease. They recommend additionally that a clear understanding of receptor sites, mediators, effector mechanisms and physiological compensation be achieved for all 50 drugs.

At the residential course for Northern Irish general practitioner trainers in April 1989, the Swedish principles were explained and the course members were invited to draw up their own lists of commonly used drugs about which they felt all general practitioners should have very comprehensive knowledge, under the headings: pain/rheumatism, circulation, psychiatry, respiration, gastrointestinal tract, urinary tract and gynaecology. Two groups of doctors drew up lists of drugs independently; 58 drugs common to both groups were selected (not far beyond the Swedish figure of 50). The level of agreement was quite close, one group suggesting 12 extra drugs and the other group an extra nine. This indicates that an academic or collegiate unit prepared to accept the challenge of delivering a series of one-day pharmacology seminars for general practitioners, based on around 70 drugs, could satisfy the preferences of most family doctors. At the rate of three such seminars per year, each consisting of eight 40-minute talks, participating general practitioners could be equipped with drug knowledge to the recommended Swedish levels within three years. Annual seminars would ensure that achieved levels of knowledge were subsequently maintained.

Even if agreeable to the profession, these proposals clearly could not be implemented in the UK in less than five years. In the meantime, carefully compiled and thoroughly tested published practice formularies,⁹⁻¹¹ though difficult to implement, are secure stepping stones to the firm ground of rational prescribing. Without undergoing the rigorous intellectual exercise just described, any general practitioner who uses a published formulary prescribes from a logical range of proven drugs, chosen for maximum safety and minimum risk of serious interactions.

Working with a more limited range of medicines, the general practitioner can then become ever more knowledgeable about commonly used drugs. Such practice must be good for patients and good for general practitioners too, since adoption of a formulary must protect us from unwarranted criticism by statutory auditors.

Yet is it not far better, in every sense, to commit ourselves in the longer term to the achievement of rationality by thorough scientific understanding, as our Swedish colleagues are doing?

H MCGAVOCK

Director, Queen's University
Drug Utilization Research Unit, Belfast

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Supply of medical and surgical appliances: is a new approach needed?

THE debate on the organization of the supply of appliances to patients is gathering momentum. A number of reports have recommended changes in the supply arrangements,^{1,2} and advances in production techniques^{3,4} would make these changes easier. The current arrangements are fragmentary and inefficient, and a different approach is needed. In the light of the health authorities' budgetary difficulties a more efficient service that provides a more acceptable end product is required. This is an important matter for general practitioners, because with poor appliances patients will adapt less well to their environment, thus placing a further drain on primary care through secondary morbidity.

Current service

The orthotics provided by the current service are calipers (leg irons) and other limb splints, surgical shoes and alterations to the patient's own shoes. In addition, there are supports such as corsets and trusses, stoma belts, knee supports and hosiery. Alterations to shoes are carried out free of charge.⁵

General practitioners are allowed to prescribe only hosiery and some trusses on FP10 forms. Patients can take the prescription to a pharmacist who will provide an item from stock or they can take it to an appliance maker who will make a made-to-measure appliance. For all other orthotics, primary health care workers must refer the patient to a specialist. The specialist may be an orthopaedic surgeon, a rheumatologist, a vascular surgeon or a chiropodist in a foot hospital. Only specialists can make the order for the appliance. They authorize the appliance to be made and stipulate the specification, selecting from the HMSO publication *MHM 50*.⁶ Allowing only specialists to order appliances that have to be individually made seems to be for reasons of competence and cost.

In the UK private companies supply appliances to 98% of hospitals and a company fitter holds clinics in the hospital. The fitter usually has a higher national diploma in orthotics and prosthetics. At the first appointment the fitter measures the patient and orders the appliance in basic form from the company. If the fitter wishes to change the order he or she must obtain