Editorial: Drug Information

Of one thing we may be sure, information about drugs is not in short supply, in the sense that an enormous quantity of paper carrying what purports to be drug information showers through doctors’ letterboxes. There is no shortage, save of relevance. True drug information is that which is available and relevant at the point of the prescriber’s pen. Information does not necessarily lead to learning, and learning is valueless if unapplied. How are doctors to ‘home in’ on the vital drug information that their patients need?

That there are now excellent basic source books is beyond doubt; the new BNF is a remarkably successful example. But the first thing a doctor needs is information about what his sources can and cannot tell him. Books and articles tell him in general what to expect a drug to do; they cannot disclose what a drug will do in a particular patient. Data sheets are invaluable, but cannot inform about the choice of remedies, nor can they give information about the late, the rare and the unusual adverse reaction, for in the very nature of things these facts cannot usually be known. This is because drug development now erodes half or more of the brief patent life of a new compound, so a manufacturer has to reap a brief episode of profitable life before the time when rare adverse effects become countable. The inverted black triangle is not, as a student said, a sign of distress at sea, but underscores the need for shrewd awareness when dealing with a recently introduced drug. Drugs are seldom tested in all those kinds of patients who will receive them; benoxaprofen and the elderly will long be remembered. Available sources of information do not give a grasp of the frequency or seriousness of the adverse effects they describe, so the urgent need is to cultivate informed awareness. What are the educational needs of medicine in this context?

Learning about drugs is as perverse as it is fascinating. There is so much information that no one can hear it properly, or sift signals of meaning from the noise. It is therefore strange that information of the deepest significance for patients’ lives and health is presented, to be absorbed subliminally, from advertisements made for the hasty glance. How much information should doctors, and patients, be given? With ‘strict liability’ legislation the amount is likely to increase so that a patient may soon lose the tablets among the wrapping. How much of it will anyone understand? Facts about drugs can be made incredibly boring if presented in pre-Raphaelite detail. The doctor needs to visualise a broad structure, to think of drugs in chemical and pharmacological classes. This information can best be gained from the drugs’ names, provided they have been chosen wisely. The next step is to think mechanistically; for example: ‘This drug is a centrally acting amine, so is that drug, hence they are likely to interact, but I can’t predict how strongly, or in what direction, because that depends on their unknown affinities . . . ’ Thinking like this is a habit which is not difficult to acquire, and it transcends acres of facts learned by rote, or read and speedily forgotten.
Hence the discussion crystallises out into what attitudes of mind are needed, and which information channels doctors really use. Most would agree that drug information handling requires informed expectancy, an attitude of rational drug choice, an inventory which is updatable and accessible, and a power of critical appraisal of the claims made for remedies. There is also a need to grasp a few technical skills, such as the power to understand and criticise reports of clinical trials.

One difficulty is common to all information: people don’t know what they don’t know. So there is no incentive to gather information unless an embarrassing display of ignorance is the spur. The antidote is a resolve to learn, to possess an enquiring mind. But this seems more often to be inherited, not acquired. Information can seem threatening; the very fear of being proved wrong can induce the certainty that one will be, by inhibiting a search for new knowledge. Other aberrant attitudes include the symbolic function of much prescribing, which makes information about drug actions redundant because it cannot describe those benefits which the prescriber seeks. It is a rare doctor who will confess what seems to be implicit in the behaviour of many, that prescribing is often ‘a token of concern’. The aim of much advertising is to condition doctors to prescribe reflexly and mindlessly on recognising certain disorders. Conditioning of the doctor is perhaps paralleled by dependence in the patients; both remove the need for genuine drug information. Doctors also fall prey to the attitudes of the society of which they are part. The relation of risk and benefit is often grasped colloquially rather than scientifically. Bias is so subtle and all pervasive. Information about drugs is, after all, drawn from experience with patients selected to receive them on the basis of prior beliefs about those drugs’ effects. But what of patients with conditions not deemed appropriate for that treatment? One has only to recollect the numerous examples of second indications for drugs, sometimes more impressive than the first, to see how real this bias is. (Consider metronidazole, verapamil and pencillamine.) A similar bias infests specialists, who often know far more about their specialty drugs than anyone else, but may assume, for that reason, that their understanding of other drugs, and of other uses of their own drugs, extends more widely than others can detect.

What of the real channels of drug information? Only a few textbooks explain the mechanisms of drug action, and few readers want that information, which is precisely the information needed to form the desirable attitudes just discussed. There are review articles, but read several reviews of the same drug and notice how the choice of facts presented is moulded by the reviewers’ own experiences. In practice, the principal sources of drug information heeded by doctors are other people; patients, nurses and clinical peers all contribute. The prolonged observation of a patient’s response to therapy is the most powerful informant of all, yet few heed, record, collect or transmit it effectively, preferring to sit over books than to watch the source of real drug information before their eyes. The problem is that information is often learned from peers rather than from experts, so subtle errors are quickly shared by many. A recent example was the suggestion among obstetricians that valproate was safer in the pregnant epileptic because it was one of the newer anti-convulsants.

Drug and poisons information centres do stalwart work. They are the ideal sources of detailed factual information and provide a unique and invaluable service. However, when a problem is partly technical, partly clinical, it is often impossible to give a balanced and relevant opinion by telephone. If there is no clinical input to the information given, it lacks perspective, and may even become dangerous when applied thoughtlessly to a clinical problem.

Hospitals are now infested with representatives of the drug industry; they are the people who resemble yesterday’s consultants, reincarnated in perennial youth. That firms have unequalled knowledge about drugs is true, but one can only extract it from their emissaries by questions, not by listening to what they are sent to say.

Then there is training; doctors begin it in their preclinical school, where many teachers are now not medically qualified, and so may teach elegantly about the drugs no longer used and do it in ways which show that they have not seen patients’ problems at first hand, so affirming to their hearers the irrelevance of what is taught, save only as a means of passing examinations. Medical students open their ears and minds mainly to knowledge about patients. Training occurs at the other end of junior life in clinical posts and postgraduate centres where little time is spent on clinical pharmacology. Another problem seems to be failure to use training programmes flexibly; it would be no bad thing for general physicians and many kinds of specialists in training to rotate through, or relate to a clinical pharmacology unit for six months or a year. The attitudes of clinicians are much more influential than the formal instruction they provide. Poor habits of acquiring and handling drug information, including rejection of, or apathy to it, are communicable diseases. Doctors resist learning about drug costs, not realising that freedom of prescription is curtailed by rising costs. The recent report of the working group on effective prescribing (‘Greenfield’) has a refreshing and informed stance upon these aspects of training, but its advice will not take root unless more posts are provided for clinical pharmacologists, and the rest of the profession will have to change its attitudes to learning practical therapy. To add point to this very matter, the Royal College of Physicians is complimented in the report on having run conferences on ‘Recent Advances in Therapeutics’, conferences which have, in fact, been discontinued for lack of support.

Several surveys have shown how poorly doctors inform patients about drugs and treatments. Donald Hunter used to stride up and down declaiming: ‘Doctor means teacher, which is why orthopaedic surgeons are called “Mr”!’ This calumnny might have fallen better upon those physicians who, despite their name, cannot communicate drug information to their patients. To explain it well to a patient is to explain it better to oneself.

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