MEDICAL PRACTICE

Process and Outcome

Postgraduate education in therapeutics: experience in Merseyside

A BRECKENRIDGE, M ORME, M J SERLIN, A S DAVIDSON, J F LOWE

British Medical Journal, 1978, **2**, 671-672

Summary and conclusions

A teaching programme in therapeutics for general practitioners in Merseyside, which was led by a group of clinical pharmacologists, had as its principal aim to emphasise the importance of rational drug prescribing. The course comprised 15 sessions restricted to 25 GPs, and the topics were suggested by both the organisers and the GPs. Though each session was introduced by a clinical pharmacologist, the emphasis was on open discussion and exchange of views. This programme may serve as a pattern for other centres.

Introduction

The basic principles of medicine, surgery, and obstetrics that doctors learnt at medical school 10 or 15 years ago are still valid, though the same cannot be said of therapeutics. Roughly two-thirds of practising doctors have apparently never received formal instruction on topics such as how the body handles drugs and mechanisms of drug action and interaction,[1] which now form the basis of rational prescribing. Nevertheless, general practitioners in 1975 wrote prescriptions to the value of about £15 000.[2]

Proposals to remedy these problems have ranged from the punitive to the seductive. A private member's Bill was introduced in the House of Commons in May 1976, which aimed at limiting the number of drugs that a doctor could prescribe unless he attended at least four full sessions a year on drug-related topics.[3] This Bill did not receive a third reading, but it raised the important matter of public and professional concern over adverse reactions to drugs and the size of the drug bill. The pharmaceutical industry were early to spot the gap in postgraduate education in therapeutics. At best their efforts are excellent, at worst they represent shoddy commercialism designed only to increase the drug bill.

There are now over 300 postgraduate medical centres in the United Kingdom, each with a clinical tutor. A recent questionnaire survey of 176 doctors showed that comparatively few sessions concerned clinical pharmacology and therapeutics.[4] Furthermore, recent changes in the regulations governing Section 63 have resulted in a fixed budget which may impede innovations.

As part of the debate on methods to encourage rational prescribing through knowledge of clinical pharmacology, we describe an educational programme which has been operating in Merseyside for the past three years.

Methods

In the autumn and Lent university terms of 1975-6, 1976-7, and 1977-8 15 sessions devoted exclusively to topics of therapeutic importance were held in Liverpool. These were advertised and sponsored by the regional council for postgraduate medical education. A circulation, limited to 200 doctors, resulted in over 80 applications within three days. This letter explained the nature of the course and how it would differ from conventional didactic lectures. The response

Department of Pharmacology and Therapeutics, University of Liverpool L69 3BX
A BRECKENRIDGE, MD, FRCP, professor of clinical pharmacology
M ORME, MD, MRCP, senior lecturer in clinical pharmacology
M J SERLIN, MB, MRCP, lecturer in clinical pharmacology

Mersey Regional Council for Postgraduate Medical Education, University of Liverpool, Liverpool L69 3BX
A S DAVIDSON, FRCS, dean of postgraduate medical education
J F LOWE, OBE, FRCGP, regional adviser in general practice

suggested that many practitioners felt the need for just this sort of approach.

We restricted the number of practitioners attending each course to 25. Informal meetings are held weekly over lunch in the medical school. An initial list of eight to 10 topics is compiled by the organising group, and the attending practitioners add a further five to seven topics. Topics have included drug treatment of hypertension, heart failure, asthma, and peptic ulcer; beta-adrenoceptor blocking drugs; hypolipidaemic agents; non-steroidal anti-inflammatory agents; choice of analgesics; minor and major therapeutics; contraceptive steroids and treatment of menopausal symptoms; and use of drugs in the elderly.

During each session a clinical pharmacologist introduces the topic, outlining the basic pharmacology of the agents being discussed, appraising their therapeutic role, and emphasising cost-effectiveness when appropriate. When necessary he guides the general discussion which follows, giving factual information, such as results of recent clinical trials. The non-didactic nature of these sessions is most important. Views are freely exchanged, anecdotal experiences encouraged, and vigorous discussions often occur. Two independent research projects have arisen from the discussions, one of which is reported elsewhere.[5] Each session is limited strictly to one hour so that practitioners may return to afternoon surgeries.

Discussion

The case for more and better postgraduate education in clinical pharmacology and therapeutics has been made by many individuals and pressure groups.[1-4 6 7] Various methods of promoting it have been suggested. Formal lectures are currently unfashionable, despite being useful in disseminating information to large groups of students; community clinics in clinical pharmacology[8] undoubtedly benefit the participant practitioners greatly, but have limited application. The use of aids to discussion on prescribing—precirculated questions and decision flow charts—in general-practitioner seminars also have their advocates.[4]

In 1975 a comprehensive, two-part postgraduate programme in therapeutics was considered. The first part was to be a new approach to problems of rational prescribing in general practice, which we have outlined here, and the second a series of locally generated drug information letters composed jointly by the Mersey Regional Health Authority Drug Information Service, the university department of pharmacology, and a steering committee of physicians and general practitioners. Ten letters have been circulated free to every general and hospital medical practitioner in Merseyside. The scheme will be discussed elsewhere, and its impact assessed.

Three courses, each for 25 general practitioners, have been held. This admittedly represents only a small proportion of the 1000 practitioners in the region. Many practitioners already of high professional ability and standing have attended, those who need education in therapeutics least being apparently most likely to attend. Two similar satellite courses for practitioners have started in the region, which members of the department attend as advisors. Furthermore, points raised in the sessions have been passed on by members of the group to their colleagues and to local representatives of pharmaceutical companies.

Topics discussed, which have largely been self-selecting, have included obviously difficult areas of therapeutic decision-making, such as treating menopausal symptoms; cases in which commonly prescribed, expensive drugs have less expensive alternatives, such as non-steroidal anti-inflammatory agents and antibiotics; important new advances in therapeutics, such as treatment of asthma and peptic ulcer; and the importance of non-drug measures in conditions such as anxiety and hyperlipidaemia.

These courses were primarily aimed at emphasising the rational basis of prescribing, not at reducing the local drug bill. Two specific research projects have arisen directly from the discussions. The first concerns the rational use of digoxin in general practice,[5] and the second drug interactions with antibiotics and contraceptive steroids in general practice.

We, like others, have found that success in running a session informally demands much more preparation than a formal lecture. We cannot assess objectively whether these teaching sessions and other methods of postgraduate education in therapeutics in Merseyside have affected patient management. Nevertheless, all the participants seem to find them useful and enjoyable.

We thank Miss Audrey Watson for her help in this project.

References

1 Binns, T D, *British Journal of Clinical Pharmacology*, 1974, **1**, 449.
2 Scottish Council for Postgraduate Medical Education, SC (77), 18. Edinburgh, 1977.
3 *Hansard*, House of Commons, 5 May 1976, col 1320.
4 Herxheimer, A, *British Journal of Clinical Pharmacology*, 1976, **3**, 111.
5 Liverpool Therapeutics Group, *British Medical Journal*, 1978, **2**, 673.
6 Rawlins, M D, *British Journal of Clinical Pharmacology*, 1977, **4**, 257.
7 Working Party on the Continuing Education of Doctors in Medicinal Therapeutics, *Report*. London, Medico-Pharmaceutical Forum, 1975.
8 Smith, A, Walker, J H, and Rawlins, M D, *British Medical Journal*, 1977, **2**, 169.

(*Accepted 9 June 1978*)

Which brand(s) of oral contraceptive would be most effective in reducing libido?

This is an unusual request nowadays, and libido is not just dependent on sex hormone concentrations. The conventional wisdom is that progestogens, particularly of the 19 nor-testosterone series, are the most likely steroids to diminish libido. The doses of the constituents of the various contraceptive pills are given in *MIMS*. Since individual responses vary the sensible approach would be to try suitable pills in a therapeutic trial until the best response is given. Each appropriate pill might be tried for about three months in turn.

Students are traditionally taught that Koplik's spots are pathognomonic of measles. Is this really so, for I have recently seen several cases that I would have diagnosed as rubella but for the presence of Koplik's spots? I have also seen similar spots in association with gingivitis and aphthous ulcers.

Difficulty may be experienced in differentiating measles from rubella, especially in between epidemics, when the catarrhal features of measles tend to be minimal and the rash atypical. Moreover, the doctor often has no opportunity to examine the patient during the prodromal period when the Koplik's spots may be present, and they fade quickly once the exanthem emerges.

Koplik's spots consist of small areas of necrosis in the basal layers of the mucosal epithelium with underlying exudation of serum and infiltration by mononuclear cells. The spots are pathognomonic of measles and are most prominent on the membrane lining the cheeks, though they may be detected on the inner aspect of the eyelids and elsewhere on the mucosae of the respiratory and intestinal tracts. At first glance, small aphthae and food debris in the mouth may be mistaken for Koplik's spots, but on closer inspection they are easily distinguished by their larger size, ease of removal, and the appearance of the surrounding mucosa. True Koplik's spots appear as grains of salt against a red granular background of inflamed mucosa and usually do not exceed 1-2 mm in diameter. A similar granular mucosa may be found in patients with viral upper respiratory tract infections and prominent mucous glands may be mistaken for Koplik's spots, but there is seldom the same degree of redness, and the glands lack the characteristic white granular appearance of the genuine lesion. When the diagnosis remains in doubt and accuracy is essential, as in pregnancy, comparison of the antibody levels in paired sera against measles and rubella may help.