MEDICAL PRACTICE

Community Clinics in Clinical Pharmacology

Clinical pharmacology clinics in general practice

A SMITH, J H WALKER, M D RAWLINS

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The size of the drug bill, the prevalence of adverse effects, and general concern about the ethos of therapeutic intervention have created an interest in prescribing, particularly in general practice. Although a major activity of general practitioners, little has been known until recently about the factors that influence prescribing behaviour or the source and reliability of the knowledge of drugs on which it is based. Eaton and Parish[1] have shown that while general practitioners gain information about the existence of drugs through the promotional efforts of the pharmaceutical industry, they assess their usefulness in clinical practice through professional sources, articles in medical journals, discussions with partners, and contacts with consultants. The process is described by these authors as more often a matter of good sense than good science.

The development of clinical pharmacology provides the opportunity of complementing good sense with science, and several individuals[2] and representative bodies[3 4] have promoted the concept that clinical pharmacologists should be widely deployed within the health service—particularly in district general hospitals. Among the contributions that these clinical pharmacologists could make, two are paramount: firstly, they should offer to undertake the clinical care of patients with drug-orientated problems (such as therapeutic failure and suspect drug toxicity); and secondly, they should provide continuing education in drugs and drug-usage to hospital staff and general practitioners working in their local communities. The service contributions of clinical pharmacologists currently working in university hospitals provide a model for their hospital roles,[5] but less attention has been paid to their relations with general practitioners. Yet it is among the latter that drug prescribing and consumption is greatest.

One way in which relations between hospital and general practice might be improved is through creating consultant clinics in group practices, health centres, and community hospitals.[6] The advantages of this type of consultation include the provision of accessible specialist care to patients[7 8] and the development of a novel form of mutual education. We describe a pilot clinical pharmacology clinic that has been set up in a group practice, and present a preliminary analysis of its effects on prescribing.

University Department of Family and Community Medicine, Newcastle upon Tyne NE1 7RU

ANDREW SMITH, MB, FRCGP, lecturer and general practitioner

J H WALKER, MRCGP, FFCM, professor

University Department of Pharmacological Sciences (Clinical Pharmacology), Newcastle upon Tyne NE1 7RU

M D RAWLINS, MD, FRCP, professor

The clinic

The clinic has been established at a group practice in Whickham, Tyne, and Wear. The practice serves a Tyneside residential suburb, with a list of 20 000 patients. The partnership consists of seven principals and a trainee, supported by ancillary staff, working from a purpose-built health centre.

The clinics are held at monthly intervals in the health centre. Each clinic starts with a series of conventional consultations, at which one of us (MDR) sees patients who have been referred by letter by members of the group. Most referrals (80%) have been concerned with drug and therapeutic problems, and the remainder have comprised general medical diagnostic problems. After each consulting session the partners and trainees discuss the cases with the clinical pharmacologist, decide on future management, and review previous patients. The session ends with a short seminar on a topic chosen by the general practitioners. The clinic lasts three to three and a half hours.

Practice prescribing

Since these clinics began in January 1976 practice prescribing has been monitored by a self-recording procedure. Every twelfth day, each

Hypnotic, anxiolytic, antidepressant, and antibiotic drugs prescribed from April 1976 to January 1977

Period	Hypnotics		Anxiolytics		Antidepressants		Broad-spectrum antibiotics
	% of total scripts	New scripts as % of total hypnotics scripts	% of total scripts	New scripts as % of total anxiolytics scripts	% of total scripts	New scripts as % of total antidepressants scripts	% of total scripts
April-May	4·0	11·6	7·1	24·7	4·9	32·1	6·5
June-July	8·0	12·5	8·8	13·2	4·0	29·2	5·8
August-Sept	4·4	8·7	6·2	6·4	6·4	15·6	5·4
Oct-Nov	5·6	5·1	6·3	9·1	5·3	27·0	4·7
Dec-Jan	4·9	7·7	6·8	2·8	4·5	25·0	5·8

partner records all patient contacts by name, diagnosis, and treatment. Repeat prescriptions are recorded and identified separately. Although the method is simple and has the advantage of providing information about prescribing in relation to diagnosis, possibly the practitioners may unconsciously or consciously modify their prescribing during recording periods. Validation will therefore depend on an assessment of total prescribing through the analysis of all prescriptions completed during the study period.

Given this potential limitation, a preliminary examination of the practice prescribing (see table) from the self-recorded data shows interesting trends. Seminars on the clinical pharmacology of hypnotic and anxiolytic treatment (mainly benzodiazepines) were held on two occasions. At a seminar in June 1976 their toxicity was discussed at length, and alternative ways of managing insomnia and anxiety were considered. This was reinforced by a further seminar and review of alternative treatment during August-September. These seminars may have had a substantial influence on starting hypnotic and anxiolytic treatment (see table). Thus new scripts for benzodiazepine hypnotics and anxiolytics (as a percentage of the total scripts for these drugs) fell from 11·6% and 24·7% (respectively) in April-May 1976 to 7·7% and 2·8% by December-January 1977. No seminars on antidepressant treatment, or the use of antibiotics, have yet been held, and the prescribing of these agents could therefore provide a form of "control." No consistent change in their prescription (except for a minor fluctuation during August-September 1976 after a discussion of a particular case in July 1976) has taken place.

Examination of the table would also suggest that the clinical pharmacologist has had little impact on the "repeat" prescribing of hypnotics and anxiolytics. The known difficulties of withdrawing such drugs from patients who have become accustomed to them would adequately explain this phenomenon.

Conclusion

The economics of general practice clinics have been discussed elsewhere.[8] When held at monthly intervals, each clinic could reasonably be expected to cover populations of around 30 000. If a clinical pharmacologist were to undertake two clinics each week a population of 240 000 served by almost 100 general practitioners could readily be covered. This combination of service and education therefore requires serious examination.

Few definitive conclusions can be drawn from this pilot study except that all participants appear to enjoy the clinics. Their impact on patient care is unknown, and their effects on prescribing are as yet uncertain. The apparent changes in benzodiazepine prescribing may be unconnected with the clinics and be due to external influences (such as the Campaign on the Use and Restriction of Barbiturates (CURB), medical journals, and the mass media). Clarification will be obtained only from a properly randomised operational study.

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What treatment is possible for a 35-year-old man in a tropical country with elephantiasis of the legs but not affecting the scrotum?

Bancroftian filariasis is probably the most likely cause of this patient's elephantiasis, despite the absence of scrotal involvement. Other diagnostic possibilities are tuberculosis or even malignancy of the iliac and femoral lymph nodes. Repeated septic lymphangitis can also cause lymphoedema (elephantiasis nostras) in the absence of filarial infection, but the symptomatic management of this condition is the same as filarial elephantiasis. Confirmation of late filarial disease is difficult, as, although adult living worms may still be present, there are usually no microfilariae detectable in night blood specimens. The Sawada antigen* skin test result is usually positive, but in endemic areas many adults will be reactive.

Unless filariasis is considered unlikely a full three-week course of diethylcarbamazine citrate, 6 mg/kg body weight a day in divided doses after meals, should be given to prevent further episodes of filarial adenolymphangitis. Patients without microfilaraemia rarely get severe sensitivity reactions, but it is still advisable to build up the dosage gradually. Skin care is of primary importance as sepsis between the toes or between folds of elephantoid tissue is common and often progresses to ascending streptococcal lymphangitis and greater lymphatic block. The patient should apply antibiotic cream and use antiseptic foot baths whenever necessary. If the lymphoedema is relatively recent the patient can reduce it considerably by sleeping with the affected legs raised and by applying pressure bandages when he gets up. Whenever acute exacerbations of the swelling occur, or there is cellulitis and tender groin glands, the patient must rest in bed with the leg raised, and he should be given parenteral penicillin for several days. Most patients with moderately severe elephantiasis do not suffer great disability provided their condition is well managed. Reconstructive plastic surgery is rarely attempted in the tropics.

*Sawada FST antigen may be obtained from the Division of Malaria and Other Parasitic Diseases, World Health Organisation, Geneva.