should not be totally restrictive, but rather a guide to the majority of prescribing to be done by the participants and it is important that all the participants feel that they have contributed to the contents of the formulary. I believe that all drugs in the formulary should be in their generic form, and this should include combination preparations if the names are not too cumbersome. Where a formulary drawn up by others is used I believe that the participants should make such modifications as to make them feel it is to some extent their own work.

This leads me on to the discussion of the use of generic prescribing (June *Journal,* pp.293-295). I believe that this is in some sense scientific and helps to place drugs into their categories as well as saving costs. If more doctors prescribe in this way it will enable the pharmacist to keep the generic formulations as the main stock. My pharmacist adviser tells me that the bulk of his return comes from the fixed returns on prescriptions, and very little from the 'on cost' element. The drug companies who develop worthwhile new drugs will make good profits, so too will the efficient producers of generic drugs; only those who produce 'me too' formulations of no particular merit will suffer deserved decline in profit.

I think we should also learn from the Israeli example as set out in Dr Cohen's letter (June *Journal,* p.300). House doctors in our hospitals should be given simple generic lists from which they could prescribe on their own initiative, having to refer to senior doctors for the more complicated and expensive drugs. While undergoing vocational training in general practice, trainers and trainees together should prepare their own lists for the trainees to use. This sets a sensible pattern for self-regulation and careful generic prescribing for the future. This is the way for the profession to avoid government interference. In many cases self-regulation already happens; if it becomes universal we have nothing to fear.

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Sir,

Until recently I was a keen devotee of 'generic' prescribing. It was clearly a 'good thing', and it gave me a sense of superiority over the fusty old general practitioner who couldn't spell dextropropoxyphene. However, a friend who is a drug company representative then told me that the Government is able to regulate directly the amount of profit that a pharmaceutical company makes in this country. The fact that the pharmaceutical industry has recently cut its advertising budget drastically in response to a Government 'clawback' suggests that he is right. If the Secretary of State for Social Services should suddenly need to raise £100 million from the industry it seems that he can do so directly without the need for a limited list. Of course, if too much is taken back, the drug companies may get annoyed and close down their research and manufacturing units in this country, but this is a political problem and not the concern of the general practitioner.

'Proprietary prescribing' means that the patient will always receive a product of the same external appearance and bioavailability, from a company with reputable quality control. The placebo effect is important; what are our hypertensive patients to think when they receive a different colour and shape of tablet every month? The good general practitioner will decide whether a prescription is necessary and, if it is, he will decide what pharmaceutical agent or agents are required. If he should choose a compound preparation he will have good reasons for his choice, but once the choice has been made, there is no merit in using the generic name for its own sake.

I think that we should prescribe what is best for our patients, and let the Government haggle over the total cost with the pharmaceutical industry.

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Antibiotics in urine specimens

Sir,

Many urine specimens received from general practice patients contain antibiotics.[1-3] Does the presence of antibiotics make the diagnosis of urinary tract infection more difficult and therefore are these specimens 'nonsense urines'? We have identified the antibiotics that are present in urine specimens received from patients of general practitioners in the Leeds area using a simple microbiological method, as described in a previous publication.[2] Patients may take antibiotics that have been left over from previous prescriptions or be taking antibiotics for the treatment of unrelated conditions such as upper respiratory tract or skin infections, or have provided a specimen after antibiotic therapy has already commenced. Some antibiotics, notably trimethoprim, may be present in significant concentrations in the urine for several days after completion of therapy and reduced renal function, particularly in the elderly, may delay the clearance of an antibiotic otherwise rapidly excreted in the urine, making it difficult to collect an antibiotic-free post-treatment specimen. Antibiotics, such as erythromycin, that are not routinely prescribed for urinary infections may still inhibit the growth of *Escherichia coli* sufficiently to obscure laboratory diagnosis.

All urine specimens received in December/January 1984/85 (limited to 1000 specimens) from general practice patients were tested for the presence of antibiotics, which were then identified.[2]

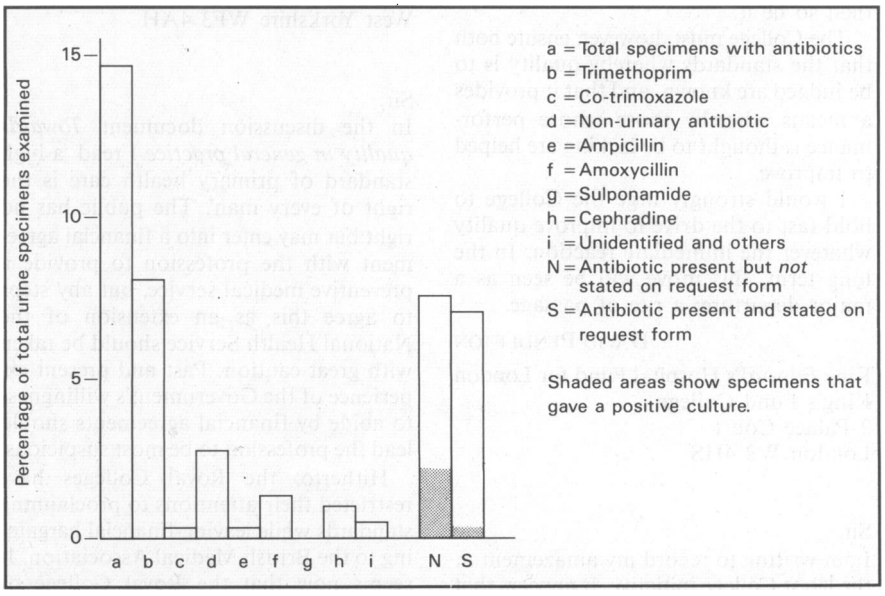

Figure 1. *Percentage of total urine specimens examined containing antibiotics. Those samples containing antibiotics where antibiotics were and were not stated on the request form are also shown as a percentage of the total urine specimens examined (n = 1000 specimens).*

Information was also recorded concerning prescribed antibiotics and the results of bacterial culture.

Figure 1 shows the percentage of the total urine specimens examined that contained antibiotics. Those samples containing antibiotics where antibiotics were and were not stated on the request form are also shown as a percentage of the total urine specimens examined.

The percentage of urine specimens containing antibiotic substances that gave a positive culture was 16.0%, with all but one of the bacterial isolates being resistant to the agent detected in the corresponding urine sample. The percentage of all urine specimens received from general practice patients with a positive culture was 18.8%. The high frequency of positive culture for specimens containing antibiotics suggests that many specimens were sent to the laboratory after symptoms had persisted, despite treatment. The higher frequency of positive cultures from specimens sent with request forms that did not state any antibiotic therapy compared with those that did implies that in some cases at least, the patient may have returned to the doctor after an unsuccessful attempt at self-treatment.

The assumption that all urine samples containing antibiotics are 'nonsense urines' is not correct for specimens received from general practitioners in the Leeds area.

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Nurse-run asthma clinics in general practice

Sir,

Recently general practitioners have been criticized for the lack of diagnosis, undertreatment and poor follow-up of asthmatic patients.[1] While it is generally accepted that asthma should chiefly be managed in general practice, identification of patients at risk, definite diagnosis, effective treatment, systematic follow-up and patient education are all essential for successful management. We now have the drugs to treat most patients effectively and should be aiming for long-term preventive treatment rather than the inherited system of 'crisis intervention'.

Ten years ago I would not have had the temerity to suggest that nurses could, and would, successfully run hypertension clinics in general practice. Even 18 months ago, I did not realize how receptive general practitioners would be, both to the concept of nurse-run hypertension clinics[2] and to a hypertension training programme for nurses. It would seem that many general practitioners now feel that full advantage should be taken of the underutilized nursing talent available in general practice.

We know that diabetic and hypertension clinics work in general practice[3] but what about asthma? One of our partners, Dr Robert Pearson, who has a special interest in respiratory medicine, felt it was a natural progression to see whether a suitably trained nurse could run an asthma clinic which would be complementary to our other clinic work.

With much encouragement from our local chest physician, Dr Lawford Hill, I spent a useful week on his chest unit and spare moments were spent in reading and 'sitting in' on asthma consultations in the practice. We set up a practice asthma register which now has 500 patients (5% of the practice population).

Our previous experience had taught us the importance of having a structured system and we developed a diagnosis and management flow chart and an asthma assessment/follow-up card to fit FP6.

The nurse-run asthma clinic operates by receiving patients by referral within the practice. Forty minutes are allowed for an initial assessment and 15 minutes for follow-up appointments. Apart from peak flow measurements, spirometry, reversibility and exercise tests and checking inhaler technique, much time is spent on patient education. Each patient is provided with a booklet and an individual advice card. Although our aim is to achieve maximum patient independence, and many of the patients have their own peak flow meters, they are encouraged to contact the asthma clinic if they run into trouble.

The nurse's activities could, of course, be kept to a minimum (for example, just recording peak flow measurements and teaching inhaler techniques). We chose to see how much responsibility could satisfactorily be given to a nurse. From my point of view it has been fulfilling, rewarding and stimulating — I am actually making people feel better.

Some doctors may feel threatened and resist the 'handing over' of their patients to a nurse-run clinic. The nurse must take care to show she is not usurping the doctor's position and that the emphasis is on teamwork with no conflict of interest. Mutual confidence and trust and the readiness of the doctor to give advice and help are vital.

It would have been impossible to pioneer a nurse-run asthma clinic without Dr Pearson's support, encouragement and particularly his tuition. Recently, a national programme of asthma study days for practice nurses has been initiated — the concept is exciting. However, its success will ultimately depend on doctors giving 'continuing' support and encouragement to their nurses after the course.

In the future 'specialist clinic nurses' could be employed by general practitioners. These nurses would need to be academically inclined and interested in integrating preventive care with therapeutic care, as well as being capable administrators and organizers. They would fulfil, in my opinion, a very real need in general practice for the care of not only the diabetic and hypertensive patient but also the asthmatic.

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Examples of special record cards, diagnosis and management flow charts and patients' treatment cards can be obtained from Mrs G.R. Barnes at the above address. Please enclose a stamped addressed envelope 10" x 7".

Advice on applying for a trainee post

Sir,

I advertised recently for a general practitioner trainee and the replies came rolling in. I was disappointed to find that the general standard of replies was so poor. Over 80% of the applications were so badly presented that I was tempted to discard them without a second look. Every year there are articles in the medical press stating the basic guidelines for job applicants in preparing their application so that they maximize their chance of overcoming the first hurdle and earning