

cedures such as surgery. The hospital has about 250 beds and is equipped with an intensive care unit, operating room and all diagnostic equipment short of magnetic resonance imaging. While in the hospital all the patients are cared for by a resident in family practice who may also admit his own patients from the family health centres. Patients admitted to the hospital are still under the care of their doctor whether general practitioner or specialist and the resident works in cooperation with these doctors.

The residents rotate to other hospitals for training in such subjects as paediatrics and obstetrics and senior residents in such subjects as surgery rotate to the hospital. The residents have formal teaching every day and the residency is run by directors who are engaged in family practice as well as teaching.

Thus, St Margaret Memorial Hospital has a large teaching system on which to base the fellowship. In fact, this is fairly typical of community hospital based residency programmes although most of the fellowships available are university based.

Since I arranged the fellowship much interest has been expressed in the idea which in both the UK and Israel is fairly rare. In view of this interest and the advantages to be gained by a fellowship I would recommend its more widespread acceptance outside the USA.

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Digoxin prescribing in general practice

Sir,

With reference to the study by Cupples and colleagues,¹ I wish to report the results of an audit of digoxin prescribing in a new town health centre in West Lothian with 9200 patients. The analysis of 23 patients (seven men and 16 women) on digoxin therapy was started prior to the publication of the larger study,¹ but our methods and analysis were modified slightly to allow direct comparison.

Only four of the 23 patients were under 60 years of age and the duration of therapy ranged from two to 36 years. Ten patients were clinically well, eight were in cardiac failure and five had signs sug-

gesting digoxin toxicity. The serum digoxin level did not correlate well with clinical signs of toxicity in that it was below the therapeutic range (1.0–2.6 nm) in nine patients, of whom three had clinical signs of digoxin toxicity; within the therapeutic range in 11, of whom one had signs of toxicity; and above the therapeutic range in three, of whom only one had signs of toxicity.

Twenty one patients were taking digoxin for adequate reasons, one was started on treatment for sinus tachycardia alone and one had mitral stenosis and was given digoxin prophylactically in case she developed atrial fibrillation. Of the 15 patients with an atrial tachyarrhythmia, only four had ventricular rates below 90 beats min⁻¹. This suggests undertreatment and this view is supported by the finding that six of the 11 patients with atrial tachyarrhythmia and a ventricular rate above 90 beats min⁻¹ had subtherapeutic levels of digoxin.

The audit revealed lack of consistency in the investigation and management of patients who were prescribed digoxin. Fifteen patients had an electrocardiogram recorded prior to digoxin therapy and 16 during treatment. Twelve patients had had a biochemical profile more than a year ago while 10 had had a profile in the last year. Only eight patients had had their serum digoxin level determined.

After the initial assessment a letter was sent to each patient's doctor with suggestions as to how the management of digoxin treatment might be improved. Four months later each patient's therapy was reviewed. Of the three patients with digoxin levels above the therapeutic range, two remained on the same dose without further serum analysis, while the dose in the third patient had been halved, bringing the serum level into the therapeutic range. Two patients had been taken off digoxin; both had been in sinus rhythm at 80 beats min⁻¹ and had had subtherapeutic levels of the drug — one was the patient who had been started on digoxin therapy for sinus tachycardia alone. Five patients had their digoxin dosage increased — in four of these patients the serum level had previously been subtherapeutic. The serum digoxin level has since been rechecked in three patients and only one was within the therapeutic range.

The survey showed that in this health centre digoxin is not commonly prescribed, but that when it is, it is for adequate reasons in the majority of cases. Our findings are otherwise similar to those of the Belfast study.¹ Assessment before and

during treatment is poor, and suggested changes in therapy are not always implemented.

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Reference

1. Cupples ME, Irwin WG, McDevitt DG. An epidemiological study of digoxin prescribing in general practice. *J R Coll Gen Pract* 1986; 36: 454-457.

Nifedipine and prostatism

Sir,

One of my patients, a man aged 72 years with long-standing exertional breathlessness secondary to ischaemic heart disease, controlled purely by bumetanide and potassium (Burinex-K, Leo), was commenced on nifedipine (Adalat, Bayer) 5 mg twice daily as a trial to improve his dyspnoea after walking 150 yards. Within 24 hours he developed urgency, poor stream, nocturia (four times a night), daytime frequency and dribbling, but there was no evidence of actual retention. The nifedipine was discontinued on his own discretion and within 12 hours his urine flow had returned to normal.

A second trial of nifedipine was begun which produced exactly the same symptoms, therefore treatment was discontinued.

This problem has been reported previously¹ but I would like to alert readers unaware of this potential danger when prescribing a calcium antagonist.

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Disabled living centres

Sir,

It is the general practitioner to whom the patient turns in time of need. It was not appreciated until 1971 that approximately 10% of the patients on a general practitioner's list have some sort of disability¹ and only recently has teaching about disability been a significant feature of undergraduate medical and general practice training. It is well documented^{2,3} that general practitioners are not always aware of the problems disabled patients may have in carrying out daily activities and,

to make the matter more complicated, patients do not realize that the general practitioner can help to solve these physical difficulties. However, the general practitioner is in an ideal position to analyse the situation and to advise the patient where to go for advice.

One such place is a disabled living centre. There are 15 offering a fully comprehensive service and six a limited service around the country and these centres provide a number of services including information on all aspects of disability for carers, a teaching base where seminars and exhibitions can regularly be held, and a centre where disabled people may go to try out equipment.

In December 1981 a disabled living centre opened in Leeds in the grounds of a geriatric hospital. It houses over 3000 of the 7000 pieces of equipment available to help disabled people. The centre and its functions have regularly been advertised on regional television and radio and in the local newspapers. Leaflets and posters can be seen in the city's libraries and in many hospital outpatient departments. All general practitioners in Leeds were sent a poster to be displayed in the waiting area and were invited to open days at the centre with the proviso that if they were unable to attend they would be made welcome at a time to suit. Only 10 of the 380 general practitioners in Leeds had visited the centre four years after it opened.

In order to discover why their response was so poor a questionnaire was sent to all 380 general practitioners in the Leeds Metropolitan district. The questionnaire sought a brief description of the practice and whether the staff were aware of the centre and its services. It asked for subjects of interest for teaching purposes and further questions sought to ascertain whether the doctor was aware of where items of equipment commonly used by disabled people may be obtained. No reminder was sent.

Fewer than 50% of the 138 respondents had heard of the centre prior to receiving the questionnaire and 21% had the poster on display. Although all district nurses and health visitors had been invited to attend a study day at the centre or to be shown around, only 30% of those known to the respondents had done so. A varying proportion of respondents knew how to obtain the most commonly used pieces of equipment — disabled driver's badge 71%, commode 11%, bath aids 52%, and wheelchair 48%. It was interesting to note that only 25% of the respondents felt that patients were disabled if they could not get out of their home.

Inability to control one's daily life is a

frustrating and depressing experience and carers frequently feel tied to the home because the disabled person is not able to make a drink, go to the toilet, reach the telephone, or make a small snack for him/herself. A visit to a disabled living centre and a call to a community occupational therapist should change this situation. With the correct equipment and efficient tuition independence in simple tasks can create a more fulfilled and happier patient.

As an occupational therapist I would like to see therapists working in health centres, attending practice meetings, identifying the functional difficulties of patients and helping to solve their problems, but, given the shortage of occupational therapists this is just a pipe dream. Nevertheless, one solution is for general practitioners to be aware of potential problems, and to direct patients to a disabled living centre where advice and help can be sought. All visitors are seen by a qualified member of staff who will spend as much time as necessary assessing and guiding the patient to the correct pieces of equipment. The centres are usually open from 09.30 to 16.30 hours Monday to Friday.

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2. Firth B. General practitioners and social help for the handicapped. *J R Coll Gen Pract* 1975; 25: 21-26.
3. Patrick DL, Peach H, Gregg I. Disablement and care: a comparison of patient views and GP knowledge. *J R Coll Gen Pract* 1982; 32: 429-434.

Telephone management of out-of-hours calls

Sir,
Dr Gadsby's figures for out-of-hours workload (Letters, October *Journal*, p.462) demonstrate why he finds weekends on duty more stressful than weekdays, with a higher disturbance rate, telephone call rate and night visiting rate at weekends. I have recorded all out-of-hours work for four years covering a population of approximately 13 000 and 223 nights on call (159 week nights) or 15% of the practice work. While my figures for weekday work are in broad agreement with those of Dr Gadsby they differ at weekends. Although I am twice as likely to visit a patient between 23.00 and 07.00

hours at weekends (33% of weekend nights versus 17% of weekday nights), the rate of calls managed by telephone is less (28% versus 40%) and the overall disturbance rate not very different (56% versus 61%). Between these hours telephone calls result in a visit on 54% of occasions at weekends and only 30% of occasions during the week.

My night visiting rate per 1000 patients per year is the same (6.0) as when last studied¹ five years ago. The rate for telephone advice calls for 23.00-07.00 hours is 10.2 per 1000 patients per year, giving a total disturbance rate of 16.2 per 1000 patients per year. The respective figures for all out-of-hours work are 35.9 (visiting rate), 102.4 (calls managed by telephone) and 138.4 disturbances per 1000 patients per year, thus, as before¹ confirming a lower visiting rate than any other study, contrary to Dr Coleman's letter (October *Journal*, p.463). However, the total disturbance rate is very similar to that found by Dr Marsh (129.9) (July *Journal*, p.301).

Of 1099 out-of-hours disturbances over four years, 813 (74%) were managed on the telephone and 286 (26%) required visits, compared with 58.6% and 36.6% in Dr Marsh's study. Between 23.00 and 07.00 hours there were 129 disturbances of which 81 (63%) were managed on the telephone and 48 (37%) by visits, compared with 58.2% and 41.8% in Dr Marsh's study.

These studies have shown repeatedly that a good proportion (49-74%) of on-call work can be managed successfully on the telephone. Dr Marsh is to be congratulated on a well argued case against those who do not credit the patient with any initiative or intelligence and believe every call needs a visit. It is up to them to produce more than anecdotal evidence that patients suffer as a result of management by telephone.

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References

1. Hobday PJ. Night workload in one health district. *Br Med J* 1984; 289: 663-664.

Sir,
We were interested to read the paper by Drs Marsh, Horne and Channing on telephone advice in managing out-of-hours calls (July *Journal*, p.301). The figure of 59% of calls managed by telephone advice approximates to the 70%