

Acute medicine in a general practitioner hospital

R. H. JONES, BM, MRCP

General Practitioner, Andover

SUMMARY. Admissions during 1980 to a hospital staffed by general practitioners are analysed. Almost all (94 per cent) were acute admissions. The mean length of stay was 11.7 days and the mean age of the patients 63.3 years, with 40 per cent of them under 65 years of age. Two thirds of the patients were discharged to their homes and only 7 per cent of patients spent more than four weeks in hospital. General practitioner hospitals have medical, social and economic advantages over large district hospitals for certain acutely ill patients and have an important role in primary medical care.

Introduction

THERE has been a renewal of interest in general practitioner hospitals (Loudon, 1977; Cavenagh, 1978; Brown, 1980). These hospitals can make a great contribution to health care, but a recent publication (Goucke, 1980) served in part to perpetuate the notion that 'cottage' hospitals are merely extensions of the psychogeriatric services, characterized by long admissions of elderly patients for social reasons. The present report is intended to demonstrate that a hospital staffed by general practitioners can also undertake acute medical work which might otherwise pass to the district general hospital (DGH). It is suggested that the general practitioner hospital may be a more appropriate setting for the care of certain acutely ill patients and that it has an important role in primary medical care.

Methods

The hospital

Andover War Memorial Hospital contains 34 medical and surgical beds. It is used and staffed by 21 general practitioners and serves a population of about 50,000 centred on an expanded market town. Andover is 15

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miles from the nearest DGH and there is a separate long-stay hospital in the town.

The hospital is next to a health centre, from which 10 of the general practitioners practise. There is a 24-hour casualty department and an out-patient department which is used by consultants in most of the specialties from the DGH, who are also available for in-patient consultations. There are also physiotherapy, x-ray and ECG facilities and a visiting pathology technician for blood tests. The casualty department is covered by a rota of all the general practitioners in the town; the hospital beds are covered out-of-hours by the individual practices.

During 1980 the casualty department dealt with 6,416 patients and 22,975 patients were seen in the out-patients department. There were 119 deliveries in the maternity unit and the physiotherapy department recorded 7,923 attendances. The x-ray department carried out 10,318 examinations. In the operating theatre there were 660 procedures under general and 198 under local anaesthesia.

Admissions

All admissions (other than elective surgical and maternity cases) during 1980 were recorded and analysed. In particular the age and sex of the patients, the date of admission and the reason for admission were noted. The discharge date and the outcome (discharge home, transfer to another hospital or death) were also recorded.

Results

There were 477 admissions to general practitioner beds in the hospital during 1980. Twenty-six (5.5 per cent) of them were planned admissions, that is frail elderly and chronic sick patients who were normally cared for at home.

There were almost exactly as many men as women (237 men, 240 women), the mean age of the patients was 63.3 years (range 8-99, median 69 years) and 40 per cent of the patients were under 65 years of age. The mean length of stay was 11.7 days (range 1-172 days). There

Reasons for admission (n = 477).		
Diagnosis	Number of patients	Per cent
Chest infections	50	10.5
Cerebrovascular accidents	48	10.0
Back pain	42	8.8
Terminal care of cancer	38	8.0
Cardiac failure	35	7.3
Malignancy	32	6.7
Planned admissions	26	5.5
Head injury & RTA	25	5.2
Ischaemic heart disease	24	5.0
Trauma	15	3.1
Retention of urine	14	2.9
Diabetes	13	2.7
Psychiatric	11	2.3
Urinary tract infection	10	2.1
Abdominal pain	10	2.1
Renal colic	9	1.9
Overdose	8	1.7
Asthma	6	1.3
Epilepsy	6	1.3
Anaemia	5	1.0
Multiple sclerosis	5	1.0
Hypertension	4	0.8
Miscellaneous	41	9.0

were 99 deaths (21 per cent of all admissions) and 67 (14 per cent) of the patients were transferred to other hospitals; the remainder were discharged home.

Reasons for admission

The diagnostic categories of the admissions are shown in the Table. Chest infection, cerebrovascular accidents (CVAs), back pain, malignancy and cardiac failure together accounted for over half of all admissions. The remainder included a variety of medical and surgical emergencies. The miscellaneous group included patients with nephritis, ulcerative colitis, cirrhosis, myxoedema, cranial arteritis, hypothermia and heart block. Procedures such as chest aspiration and drainage of ascites are also included in this group.

Deaths

Cardiac failure, CVA, cancer and chest infection together accounted for three quarters of the 99 deaths. The mean length of admission for the patients who died was 9.8 days and their mean age was 75 years.

Transfers

Thirty (6.3 per cent) of all admissions were transferred to a DGH. The commonest diagnosis in this group was urinary retention (14), that is the patient was referred for investigation and treatment after catheterization. Other reasons for transfer included anaemia requiring blood transfusion, uncontrolled diabetes with ketonuria, complications of myocardial infarction and con-

ditions requiring operation. Another 28 patients (5.9 per cent) were transferred to long-stay geriatric beds and the remainder went to Part III accommodation, a psychiatric hospital and a terminal care unit.

Long stays

Thirty-four patients (7.1 per cent) spent over four weeks in the hospital. Fourteen of these were eventually transferred to long-stay geriatric beds, six died and the remainder comprised mostly CVAs, diabetic patients and patients with cancer and skin ulcers.

Discussion

This report shows that a general practitioner hospital relatively remote from the district general hospital can care for a variety of acutely ill patients. There is evidence that up to one quarter of admissions to DGHs are unnecessary, that is the patients could be as well cared for in a general practitioner hospital (Evans, 1969; Torrance *et al.*, 1972) and in areas remote from the DGH, up to 70 per cent of inpatients may be cared for in this way (Kyle, 1971). Without a general practitioner hospital, the majority of the patients admitted to Andover would have been taken to the DGH, yet the low transfer rate from the hospital suggests that these cases were appropriately selected. Although the age and sex distribution of the patients reported here is similar to that in other studies (for example Kyle, 1971), the average length of stay of 11.7 days was considerably lower than in most reports and almost half the national average for general practitioner hospitals of 20.1 days calculated by Cavenagh (1978). This was partly due to the low proportion of admissions for social reasons and would be considerably lower if surgical and maternity cases had been included in the analysis.

The categories of admissions in Andover were similar to those in other series except that fewer patients with abdominal pain were admitted (for example Kyle, 1971) and that back pain represented a major cause of admissions. Most of these patients had acute back pain and were admitted for bed rest and traction. In this way admission to the orthopaedic ward at the DGH was avoided. Loudon (1977) identified three groups of admissions. On the one hand are those for whom specialist facilities are essential, such as haematemesis and melaena, and on the other those for whom such facilities would be wholly inappropriate, for instance holiday admissions. Between these extremes lie the majority of cases for which general practitioner hospital and DGH treatment may be appropriate. The patient's age becomes an important discriminant factor and this may reflect the expectations of patients, relatives and medical staff. Loudon (1973) found marked differences between the proportions of over-65s admitted from one practice to a DGH and a general practitioner hospital (36 and 72 per cent respectively). The figures for Andover are less disparate, with 60 per cent of patients

over the age of 65 compared with 42 per cent in the DGH.

The use of the general practitioner hospital to observe patients following head injury and after drug overdose has not previously been discussed; it may be more appropriate for the latter group to be cared for by their own general practitioner, unless they are severely poisoned, rather than submit them to the "Overdose—would psychiatrist please see?" routine of the DGH (*Lancet*, 1981). This may be a preferable setting, too, in which confused and disturbed patients can be assessed. Unnecessary, expensive and potentially harmful investigations (McLamb and Huntley, 1967) are likely to be kept to a minimum if only because batteries of screening tests are not expected, and therapy is likely to be simpler and perhaps more appropriate. The support of visiting hospital staff from the DGH is, of course, an important factor in management.

One fifth of the patients died. This means that an understanding of terminal care is important for the staff, but it also means that these patients died close to their homes and where they were accessible to relatives. However, the majority of the patients left hospital and went home; the 40 per cent of the admissions who were under the age of 65 balanced the mortality rate and encouraged a positive attitude towards treatment.

There may also be economic advantages to care of the acutely ill in general practitioner hospitals. District general hospital care is costly and local calculations indicate a significant saving in terms of the daily cost of inpatients in general practitioner hospitals compared with the DGH. Although comparative costs are often difficult to calculate, there are other suggestions that general practitioner hospital care is cheaper (Rickard, 1976; Loudon, 1977). There are also the reduced requirements for ambulance transport, currently almost £2 per patient mile, and the saving to visiting relatives of time and money.

Beyond these local social and financial advantages lie benefits for individual general practitioners and for general practice. Although there are few financial incentives to undertake work in the general practitioner hospital, it is clear that general practitioners find the work attractive in itself (Evans, 1969; Cavenagh, 1978). They are allowed to practise clinical skills which might otherwise atrophy, and contact with hospital colleagues encourages them to keep knowledge and skills up to date. Indeed, general practitioner hospital and the health centre together form a natural setting for post-graduate education in general practice. The continued development of general practitioner hospitals would be of great value both for community health and for the future of general practice.

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Address for reprints

R. H. Jones, 56 Junction Road, Andover, Hants, SP10 3QU.

The

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Diagnostic Quiz

The answers to the February quiz are as follows:

1. What might you suspect?

Cerebral tumour, neurosyphilis

2. What investigations might you consider appropriate?

EEG, Wasserman

3. What, if any, might a diagnosis be?

Tumour in the prefrontal area of the (left) cerebral hemisphere.

The winner of a £100 British Airways travel voucher is Dr S. P. Cembrowicz of Bristol.