

Comparison of patients attending general practitioner and consultant day hospitals for the elderly

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SUMMARY. A comparative study of patients attending general practitioner and consultant day hospitals for the elderly in Clwyd is described. The general characteristics of both patient groups were similar. There were, however, differences in the types of illness represented: disorders of the nervous system, mainly strokes, comprised over one third (37 per cent) of the consultant day hospital cases; disorders of the musculoskeletal system, mainly osteoarthritis, comprised nearly one third (29 per cent) of the general practitioner group. Over 70 per cent of patients attending both types of day hospital had been discharged within six months and most attended once or twice each week. Clinical evaluation on discharge showed that over 80 per cent of the patients in both types of hospital had shown improvement or had not further deteriorated during their period of attendance.

It is concluded that day hospital care in community hospitals, supervised by general practitioners, can make an effective contribution to total health care provision for the elderly.

Introduction

IT is now widely accepted that the response of the health services of the United Kingdom to the daunting challenge posed by the increasing numbers of very old people in society must largely be directed towards the maintenance of independent living within the community.¹ This reflects modern medical practice and the wish of most elderly people.²

Over the past decade or so, day hospitals have come to be regarded as having an important role to play in this strategy and this has resulted in a considerable increase in their numbers.³ However, this increase has largely taken place within the context of the consultant geriatric service, and experience of the operation of non-consultant managed day hospitals for the elderly is limited.⁴ It has been suggested that the service provided by general practitioner day hospitals is less like that of

consultant-managed day hospitals⁵ and that the former admit a different type of patient.⁶

This paper describes a study carried out in Clwyd to compare day hospital care supervised by general practitioners with that provided at a district general hospital geriatric day hospital under consultant control.

The aims of the study were to obtain information on the clinical and social characteristics of patients attending these two different types of day hospital, and to compare the duration of attendance and the outcome for the patients concerned.

Method

The county of Clwyd is situated in north-east Wales, and has a resident population of 385,581, of whom 64,445 are aged 65 years and over.⁷ It is predominantly a rural county and is served by two district general hospitals, some 30 miles apart, together with a supporting network of small local community hospitals, some of which have facilities for day hospital care under the supervision of the local general practitioners.

Three purpose-built day hospitals were studied: two hospitals operated by general practitioners—one hospital having 10 places and the other 15 places—and one consultant day hospital of 25 places. The operational policy for general practitioner day hospitals in Clwyd has been described before,⁴ the essentials being that the patient's own general practitioner is responsible for admission, clinical management and discharge.

A questionnaire devised for the study was completed in respect of all patients by one of us (R.S.R.). The required information was obtained from clinical case notes and the records kept by nursing, physiotherapy and occupational therapy staff. Where indicated, this information was also validated by personal interviews with patients.

There were two separate components to the study:

1. A one-week census of all patients who were attending the three day hospitals during the same week in April 1982: 142 patients were studied (57 (40 per cent) males and 85 (60 per cent) females).

2. A retrospective study of a systematic sample of patients who were discharged from the three day hospitals during 1981, to

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derive information on duration of attendance and outcome. The study sample was obtained by selecting every second discharge from the list of consecutive discharges from the day hospitals: 168 patients were studied (59 (35 per cent) males and 109 (65 per cent) females). Duration of attendances was defined as the period of attendance between the day of admission and day of discharge.

The outcome measures were those employed in Brocklehurst's study⁸ and consisted of disposal of patient and clinical evaluation of each patient undertaken by the doctor concerned at the time of discharge.

Results

Patients attending the two general practitioner day hospitals were similar to those attending the consultant day hospital in marital status and social class (Registrar General's classification), domicile and main carer (Table 1) and in terms of main reason for attendance (Table 2). Compared with patients attending the consultant day hospital, those attending the two general practitioner units tended to be younger (Table 1) and included fewer patients who were able to walk unaided and more who were incontinent (Table 3). Fewer patients attending the general practitioner day hospitals were receiving domiciliary support, with the exception of visits from their own general practitioner (Table 4).

In terms of principal diagnosis (*ICD-9*)⁹ on admission, musculoskeletal disease featured more often in the general practitioner units than in the consultant hospital. In the latter, disease of the nervous system was

Table 1. Characteristics of patients. Percentage comparison.

	Type of day hospital	
	General practitioner (n=80 patients)	Consultant (n=62 patients)
<i>Age (years)</i>		
< 64	16	—
65-74	26	25
75-84	43	55
85+	15	20
<i>Marital status</i>		
Single	11	5
Married	35	42
Widowed	54	53
<i>Social class</i>		
I and II	15	11
III	74	82
IV and V	11	7
<i>Domicile</i>		
Own home	81	82
Relative's home	13	16
Other	6	2
<i>Main carer</i>		
None	36	39
Spouse	33	34
Children	21	16
Other	10	11

the most common diagnosis (Table 5).

General practitioner day hospital patients were almost all referred direct from their own domicile, whereas most patients from the consultant day hospital had previously been inpatients at the hospital (Table 6).

The general practitioner patients received fewer sedatives but more analgesics, antirheumatics, diuretics, and other prescribed drugs (Table 7) than those under

Table 2. Reasons for, and frequency of, attendance. Percentage comparison.

	Type of day hospital	
	General practitioner (n=80 patients)	Consultant (n=62 patients)
<i>Main reason for attendance</i>		
Medical	36	35
Rehabilitation	38	40
Nursing care	20	13
Social care	6	12
<i>Frequency of attendance per week</i>		
Once	21	50
Twice	64	35
Three times	9	10
Four times and more	6	5

Table 3. Mobility and continence of urine at time of admission. Percentage comparison.

	Type of day hospital	
	General practitioner (n=80 patients)	Consultant (n=62 patients)
<i>Degree of mobility</i>		
Walking unaided	24	38
Walking with frame	54	43
Walking with help	18	11
Chairfast	4	8
<i>Continence of urine</i>		
Wholly continent	71	89
Incontinent		
occasionally/ frequently	16	3
Urethral catheterization	8	8

Table 4. Use of domiciliary services immediately prior to admission. Percentage comparison.

	Type of day hospital	
	General practitioner (n=80 patients)	Consultant (n=62 patients)
Home help	43	61
Meals on wheels	29	56
Health visitor	6	11
District nurse	51	72
Visits by general practitioner	45	21

the care of consultants. Duration of attendance is shown in Table 8.

Finally, general practitioners, when discharging patients, were more likely to say there had been 'improvement' rather than 'no change' compared to their counterparts in the consultant day hospital (Table 9).

Discussion

Day hospital care by general practitioners in community hospitals is a relatively recent development in the care of the elderly. In this study the similarity in the general characteristics of the patients attending both types of day hospital is thought worthy of comment, especially as there was no common policy in the selection of patients for admission. That is to say, there had been no prior discussion involving the general practitioners and consultants as to the operational policy to be pursued within the two general practitioner day units. The majority of patients came from social class III, although this class made up only 49 per cent of the general population of the area.¹⁰ It may be that elderly patients in social classes I and II are in a position to make their own alternative arrangements for care, whereas those in social classes IV and V are either unable or unwilling to take advantage of the services offered.

It has been suggested that the prevalence of urinary

incontinence may be 20 per cent or more among elderly people aged over 65 years living in the community,¹¹ and this is reflected in the data on those patients who attended the two general practitioner day hospitals (Table 3). However, the proportion of patients with urinary incontinence who attended the consultant unit was much lower, which raises the possibility that a 'selecting-out' mechanism may have been in operation to exclude patients suffering from incontinence because of problems associated with management, especially during journeys to and from the day hospital.

The greater use of domiciliary support services by the consultant day hospital patients was somewhat un-

Table 5. Principal diagnosis (ICD) on admission. Percentage comparison.

	Type of day hospital	
	General practitioner (n = 80 patients)	Consultant (n = 62 patients)
Mental disorder	2	5
Diseases of the nervous system	29	37
Diseases of the circulatory system	20	19
Diseases of the musculoskeletal system	29	8
Other	20	31

Table 6. Source of referral to day hospital. Percentage comparison.

	Type of day hospital	
	General practitioner (n = 90 patients)	Consultant (n = 78 patients)
Direct from own domicile	96	3
Consultant domiciliary visit	—	15
Outpatient clinic	—	16
Inpatient	4	66

Table 7. Investigation and treatment. Percentage comparison.

	Type of day hospital	
	General practitioner (n = 80 patients)	Consultant (n = 62 patients)
Investigations	51	29
Nursing care	91	90
Occupational therapy	95	93
Physiotherapy	76	88
Prescribed drugs		
Analgesics	38	19
Antirheumatics	18	3
Diuretics	40	11
Sedatives	37	62
Others	68	32

Table 8. Duration of attendance (days). Percentage comparison.

	Type of day hospital	
	General practitioner (n = 90 patients)	Consultant (n = 78 patients)
0-30 days	20	13
31-90 days	23	31
91-180 days	34	26
181-360 days	10	23
361+ days	13	7

Table 9. Outcome of attendance. Percentage comparisons.

	Type of day hospital	
	General practitioner (n = 90 patients)	Consultant (n = 78 patients)
<i>Clinical evaluation</i>		
Improvement	53	45
No change	29	40
Deterioration	15	15
Not known	3	—
<i>Disposal</i>		
Admitted to acute hospital	29	24
Medical discharge	40	41
Self-discharge	12	24
Other	19	11

expected. Perhaps in the consultant day hospital there was a tendency by staff to 'play it safe' by asking for more domiciliary support because of an understandable lack of intimate knowledge of each patient's home situation.

In terms of diagnostic category, over one third (37 per cent) of the consultant day hospital group were classified as having disorders of the nervous system, mainly strokes, while nearly one third (29 per cent) of the general practitioners' group had disorders of the musculoskeletal system, mainly osteoarthritis. Only a small minority of patients attending either type of unit were doing so for social reasons. This is considered to be particularly reassuring with regard to the general practitioner day hospitals because of the concern¹² that they might be used inappropriately in a social support role, which would not make the best use of the skills of specialist NHS staff in these units.

The only striking difference noted in the treatment programmes was the much higher proportion of patients in the general practitioner units who received laboratory investigations (51 per cent). Nevertheless, this was not regarded as being especially significant because most of the patients attending the consultant day hospital did so after a period spent as inpatients where they could be expected to have been fully investigated.

Turning now to the results of the retrospective study, it can be seen that there were no significant differences between either group of patients in duration of attendance at hospital, over 70 per cent of both groups attending for six months or less. There was a broad similarity of outcome as measured by disposal, with the single exception of self-discharge which was twice as high among the consultant day hospital group.

Finally, using the clinical evaluation of the doctor responsible for discharging the patient as an outcome measure, it can be seen that over 80 per cent in both patient groups were classified as either being 'improved' or showing 'no change'. It can be argued that the 'no change' group represents therapeutic success because at least the patients had not deteriorated further during their period of attendance at the day hospital.

We consider that the results obtained in this study support the view that day hospital care in community hospitals, supervised by the patient's own general practitioner, can make an effective contribution to total health care provision for the elderly, when assessed against day hospital care provided within consultant units. We believe that earlier fears¹³ that this type of care would not be as effective as that provided within consultant units may have been overstated and that what is now needed is much closer dialogue between consultant and general practitioner services to identify more precisely how each type of day hospital can complement the other.

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Anaemia in runners

Iron deficiency, with or without anaemia, occurs commonly in long-distance runners, but the cause is unknown. The recent development of a simple quantitative assay for faecal haemoglobin, HemoQuat, allowed the authors to study whether gastrointestinal bleeding occurs in runners. Blood and stool samples were collected from 24 runners before and after a race of 10 to 42.2 km and from age- and sex-matched, nonrunning controls. The mean blood haemoglobin level and haematocrit were significantly lower in runners than in controls. Serum ferritin levels were below normal in four runners but in no controls. Faecal haemoglobin levels increased in 20 of 24 runners ($P < 0.01$) after a race. Mean faecal haemoglobin level was 1.08 mg g⁻¹ (range, 0.11 to 2.36) in controls and 0.99 mg g⁻¹ (0.18 to 2.41) in runners before a race, but peaked at 3.96 mg g⁻¹ (0.37 to 43.20) after a race. Competitive long-distance running induces gastrointestinal blood loss and may contribute to iron deficiency.

Source: Stewart JG, Ahlquist DA, McGill DB, *et al.* Gastrointestinal blood loss and anaemia in runners. *Ann Intern Med* 1984; **100**: 843-845.