PSYCHIATRIC DAY-CARE THE NEW CHRONIC POPULATION?

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In recent years, with the growing emphasis on community psychiatry, day-care has become a major form of provision for psychiatric patients in the community. Since the inception of the National Health Service, the number of psychiatric day-hospitals in England and Wales has risen from two in 1949 to 65 in 1966 (Department of Health and Social Security, 1969). Large numbers of patients are currently enrolled in psychiatric day-facilities. There is clearly a need for evaluative studies of this mode of care, particularly as few systematic studies have been carried out so far.

In a previous communication, the authors reported the first part of a study of the functioning of the psychiatric day-services in Birmingham (Hassall, Gath, and Cross, 1972). A description was given of the psychiatric and social characteristics of all patients attending the seven Birmingham day-hospitals during a census week in November 1968.

The present paper reports the findings of the second part of the enquiry, which was concerned with the attendance patterns and modes of discharge during the 12 months following the census week.

PSYCHIATRIC DAY-SERVICES IN BIRMINGHAM

Psychiatric day-services in Birmingham serve a catchment area of some 1,250,000 persons. The number of new day-patients per annum has risen from 442 in 1961 (when day-patients were first officially recorded) to 1,439 in 1969. Day-care is divided between four large psychiatric hospitals, A, B, C, and D, in descending order of size, and three small hospitals, E, F, and G, also in descending order. The type of provision varies considerably between the different hospitals; a detailed description of them was given in the previous paper.

METHOD

A census was taken of all day-patients attending the seven psychiatric day-care facilities in Birmingham during the week 24-30 November 1968. Information was collected in two stages:

(1) During the census week a precoded item sheet was completed for each patient. Items were abstracted from hospital case-notes and included

basic demographic data, diagnosis, and duration of present illness, together with details of previous day-patient and other psychiatric care.

(2) During the 12 months following the census week, information concerning attendance patterns and mode of discharge was compiled from hospital attendance registers and by interviewing medical and nursing staff. The present paper is concerned with this stage.

Many studies of day-care have been based on admissions over a period of time rather than on a census at a point in time. The census method offers advantages in so far as it includes chronic cases which might possibly form a substantial nucleus of the patient population.

RESULTS

DEMOGRAPHIC AND CLINICAL CHARACTERISTICS OF THE CENSUS POPULATION

During the census week, the total number of patients attending day-hospital facilities in Birmingham was 647. The great majority (583) were attending the four large hospitals, and of these the greater part (342) were at hospital A. Only 64 patients were attending the small hospitals.

The age-sex structure of the population is shown in Table I. In all hospitals together, women outnumbered men by three to two. In the large hospitals, a large proportion of female patients were elderly, while the men tended to be young or middle-aged. Patients of both sexes in the small hospitals were younger, three-quarters of them being under 45 years of age.

Further descriptive details of the population were published earlier (Hassall *et al.*, 1972). To recapitulate briefly, in both large and small hospitals the proportion of single, separated, divorced or widowed patients was above expectation. In the large hospitals the main diagnostic categories were schizophrenia and affective disorders, neuroses, and personality disorders. Patients in the large hospitals carried a greater morbidity, as measured by the number of previous inpatient admissions and length of previous care as day-, in-, or out-patients.

TABLE I
AGE AND SEX DISTRIBUTIONS OF PATIENTS BY TYPE OF HOSPITAL

Sex and Hospital	Age Group (years)				
	Under 25	25-44	45-64	65 and over	All Ages
MALES					
Hospital A	13	56	71	13	153
Other large hospitals	5	16	26	27	74
All large hospitals	18	72	97	40	227
Small hospitals	9	12	5	1	27
All hospitals	27	84	102	41	254*
FEMALES					
Hospital A	1	32	86	69	188
Other large hospitals	9	21	49	85	164
All large hospitals	10	53	135	154	352
Small hospitals	8	19	9	1	37
All hospitals	18	72	144	155	389**
BOTH SEXES					
Hospital A	14	88	157	82	341
Other large hospitals	14	37	75	112	238
All large hospitals	28	125	232	194	579
Small hospitals	17	31	14	2	64
All hospitals	45	156	246	196	643***

* 1 patient's age not known
** 3 patients' ages not known
*** 4 patients' ages not known

ATTENDANCE RATES

Mean weekly attendance rates (days per week per patient) were calculated for each of three trimesters: (1) the trimester ending at the end of the census week, 30 November 1968; (2) the trimester immediately following the census week and ending 28 February 1969; (3) the last trimester of the 12-month follow-up period, ending 30 November 1969.

The rates are set out in Table II, in which the patients have been subdivided according to whether they were in day-care before the census week for: less than 3 months (short stay), 3 and over but less than 12 months (medium stay), 12 months and over (long stay). For each of these subgroups, and in each of the three trimesters, mean weekly attendance rates were higher at hospital A than at the other large hospitals. In the small hospitals, mean attendance rates were high in all three trimesters, though only two patients were still attending in the last trimester.

NUMBER OF PATIENTS DISCHARGED DURING FOLLOW-UP YEAR

The cumulative monthly totals of patients discharged during the follow-up year have been calculated for hospital A, the other large hospitals, and the small hospitals separately. These are shown

in the Figure as percentages of the total numbers of patients receiving day-care during the census week.

The cumulative curve for hospital A is virtually parallel to the curve for the other large hospitals; the difference between them arises because only 2% of hospital A patients were discharged during the first month as compared with 16% of patients

TABLE II
AVERAGE WEEKLY ATTENDANCE† (DAYS) OF PATIENTS BY DURATION OF DAY-PATIENT CARE BEFORE CENSUS

Type of Hospital	Trimester ending	Previous Duration of Day-patient Care (months)		
		< 3	3 —	12 and over
Hospital A	30 Nov. 1968	3.8	4.3	3.6
	28 Feb. 1969	4.1	4.1	3.7
	30 Nov. 1969	4.8	4.3	3.9
Other large hospitals	30 Nov. 1968	2.9	2.6	2.1
	28 Feb. 1969	2.9	2.9	2.8
	30 Nov. 1969	2.6	2.7	2.9
All small hospitals	30 Nov. 1968	4.3	4.0	—
	28 Feb. 1969	4.0	3.9	—
	30 Nov. 1969	4.6*	4.7*	—

* One patient only.

† These averages have been calculated by dividing the total daily attendances by the number of patient-weeks of day-care.

FIGURE Cumulative distribution of discharges during the follow-up year.

attending the other large hospitals. Thus at hospital A, 30% of patients had been discharged by the end of the year compared with 45% of patients at the other large hospitals. The curve for patients discharged from the small hospitals is quite different in that 44% of patients were discharged during the first month and all but two patients by the end of the year.

MODE OF DISCHARGE

For all patients in the census population, the mode of discharge was examined in relation to type of hospital, length of day-care before the census week, patient's age, and diagnosis.

TYPE OF HOSPITAL As shown in Table III, discharge patterns differed widely between large and small hospitals.

In the large hospitals, the majority of patients (64%) were still in day-care at the end of the 12-month follow-up period, while 15% had returned to the care of the general practitioner, 10% had become psychiatric inpatients, and 4% psychiatric outpatients.

On the other hand, in the small hospitals, only 3% (2 patients) were still in day-care at the end of the year; a large proportion (36%) had returned to the care of the family doctor and 6% (4 patients) had been admitted to psychiatric inpatient care, while the largest group (42%) had become psychiatric outpatients.

A point to be stressed is that, of the total population of 640 patients for whom the mode of discharge was known, 58% were still in day-care at the end of the follow-up year, and as many as 75% were still receiving hospital psychiatric care of some kind, whether as day-patients, outpatients or inpatients.

TABLE III
DISPOSAL DISTRIBUTIONS (PER CENT) BY TYPE OF HOSPITAL

Sex and Hospital	Still Attending	Psychiatric		GP	Other	Totals
		IP	OP			
MALES						
Hospital A	68.4	5.3	1.3	17.8	7.2	100.0 (152)
Other large hospitals	47.3	23.0	8.1	16.2	5.4	100.0 (74)
All large hospitals	61.5	11.1	3.5	17.3	6.6	100.0 (226)
Small hospitals	7.4	7.4	37.0	37.0	11.1	99.9 (27)
All hospitals	55.7	10.7	7.1	19.4	7.1	100.0 (253)*
FEMALES						
Hospital A	72.0	6.5	2.2	13.4	5.9	100.0 (186)
Other large hospitals	58.5	12.2	6.7	14.0	8.5	99.9 (164)
All large hospitals	65.7	9.1	4.3	13.7	7.1	99.9 (350)
Small hospitals	—	5.4	45.9	35.1	13.5	99.9 (37)
All hospitals	59.4	8.8	8.3	15.8	7.7	100.0 (387)**
BOTH SEXES						
Hospital A	70.4	5.9	1.8	15.4	6.5	100.0 (338)
Other large hospitals	55.0	15.5	7.1	14.7	7.6	99.9 (238)
All large hospitals	64.1	9.9	4.0	15.1	6.9	100.0 (576)
Small hospitals	3.1	6.2	42.2	35.9	12.5	99.9 (64)
All hospitals	58.0	9.5	7.8	17.2	7.5	100.0 (640)***

* 2 males disposal not known
 ** 5 females disposal not known
 *** 7 disposals not known

LENGTH OF DAY-CARE BEFORE CENSUS WEEK The relationship between mode of discharge and length of day-hospital care before the census week is shown in Table IV. Results are given for both sexes combined since there were negligible differences between the sex distributions.

The percentage of patients still attending at the end of the follow-up period increased consistently with the duration of day-care before the census week: the proportions ranged from 32% for those who had attended for less than six months to 83% for those who had stayed for two years or more.

Of those who had attended for less than six months, 15% and 16% were discharged to psychiatric inpatient and outpatient care respectively;

and one-quarter were discharged to their general practitioners. For each of these three categories of disposal, the proportion decreased as the duration of attendance increased and, except for the finding that one-fifth of those who had attended for between six months and a year were discharged to their general practitioner, these proportions were all small.

PATIENT'S AGE The relationship between the patient's age and mode of discharge is shown in Table V. Of the small number of patients of both sexes under the age of 25 years, one-third were still attending at the end of the follow-up year. The proportion still attending increased with increasing age: 43% aged 25-44, 66% aged 45-64, and 67% aged 65 and over. In the two older age groups there

TABLE IV
DISPOSAL DISTRIBUTIONS (PER CENT) BY LENGTH OF PREVIOUS ATTENDANCE (BOTH SEXES)

Duration of Previous Attendance	Still Attending	Psychiatric		GP	Other	Totals
		IP	OP			
< 6 months	31.5	14.7	15.9	25.9	12.0	100.0 (251)
6 months —	64.2	6.5	3.3	19.5	6.5	100.0 (123)
1 year —	77.0	7.1	4.4	8.0	3.5	100.0 (113)
2 years and over	83.2	5.4	0.7	7.4	3.3	100.0 (149)
All durations	58.0	9.6	7.9	17.1	7.4	100.0 (636)*

* 7 patients disposal not known; 4 patients length of previous attendance not known.

TABLE V
DISPOSAL DISTRIBUTIONS (PER CENT) BY AGE GROUP

Years					Still Attending	Psychiatric		GP	Other	Total
						IP	OP			
MALES										
< 25	..	..	..	42.9	3.6	10.7	32.1	10.7	100.0 (28)	
25-44	..	..	..	43.4	6.0	9.6	33.7	7.2	99.9 (83)	
45-64	..	..	..	71.0	10.0	6.0	6.0	7.0	100.0 (100)	
65 and over	..	..	..	52.4	26.2	2.4	14.3	4.8	100.1 (42)	
Total					55.7	10.7	7.1	19.4	7.1	100.0 (253)*
FEMALES										
< 25	..	..	..	16.7	5.6	22.2	44.4	11.1	100.0 (18)	
25-44	..	..	..	41.7	8.3	23.6	18.1	8.3	100.0 (72)	
45-64	..	..	..	62.0	7.7	7.0	15.5	7.7	99.9 (142)	
65 and over	..	..	..	70.3	10.3	0.6	11.6	7.1	100.1 (155)	
Total					59.4	8.8	8.3	15.8	7.7	100.0 (387)**
BOTH SEXES										
< 25	..	..	..	32.6	4.3	15.2	36.9	10.9	99.9 (46)	
25-44	..	..	..	42.7	7.1	16.0	26.4	7.7	99.9 (155)	
45-64	..	..	..	65.7	8.7	6.6	11.6	7.4	100.0 (242)	
65 and over	..	..	..	66.5	13.7	1.0	12.2	6.6	100.0 (197)	
Total					58.0	9.5	7.8	17.2	7.5	99.9 (640)***

* 2 males disposal not known

** 5 females disposal not known (including 3 age not known)

*** 7 patients disposal not known (including 3 age not known)

TABLE VI
DISPOSAL DISTRIBUTIONS (PER CENT) BY DIAGNOSIS (BOTH SEXES)

Diagnosis	Still Attending	Psychiatric		GP	Other	Totals
		IP	OP			
Senile psychosis	55.4	19.3	1.2	13.3	10.8	100.0 (83)
Schizophrenia	71.1	9.1	3.4	10.3	6.0	99.9 (232)
Affective disorders	52.5	6.5	12.5	19.5	9.0	100.0 (200)
Neurosis	21.2	—	15.2	60.6	3.0	100.0 (33)
Other	53.9	12.4	12.4	14.6	6.7	100.0 (89)
All diagnoses	58.2	9.6	7.8	16.8	7.5	99.9 (637)*

* Excluding 7 patients disposal and diagnosis not known; 3 with diagnosis not known.

were differences between the sexes: 71% of men aged 46-64 were still attending as against 62% of women, while in the over 65 age group, the proportions were reversed, 52% and 70% respectively.

DIAGNOSIS It can be seen from Table VI that a large proportion of the 232 schizophrenic patients were in psychiatric care at the end of the follow-up year: 71% were still attending as day-patients and a further 9% had become inpatients. The corresponding proportions were 52% and 6% of patients with affective disorders, and 55% and 19% of those with senile psychosis. As would be expected, the highest proportion of patients returning to the care of the family doctor was among those with neuroses (61%).

DISCUSSION

Several salient findings emerge from this 12-month follow-up study of 647 psychiatric day-patients. In the four large hospitals, more than half the patients were still receiving day-care one year after the census. The proportion of patients still in day-care increased with increasing length of day-care before the census week, only one-quarter of long-stay patients being discharged at the end of the year. This pattern of chronicity was found mainly at large hospital A but also applied substantially at the other large hospitals. The frequency of weekly attendance in all the large hospitals was almost as great for long-stay as for medium- and short-stay patients.

In the small hospitals, the main point of contrast was that nearly all patients had been discharged six months after the census. The frequency of weekly attendance was high, reflecting programmes of intensive treatment.

In the first stage of this study (Hassall *et al.*, 1972), it was found that the day-population of large hospitals differed sharply from that of the small hospitals: patients in large hospitals were older and more often single or widowed, included the majority of schizophrenics, and carried a greater morbidity as

measured by frequency and duration of previous psychiatric care. The findings of the second stage of the study, reported in the present paper, are wholly consistent with these earlier findings. They justify the conclusion that in the large hospitals the majority of day-patients are of poor prognosis and require long-term care on a day-to-day basis. This is probably because the traditional psychiatric hospitals, in an endeavour to reduce overcrowding by decreasing the numbers of occupied beds, have transferred large numbers of long-term patients from inpatient to day-care.

Day-care may be defined as 'a transitional or intermediary stage between home and hospital' (Department of Health and Social Security, 1969). It is clearly important to take cognisance of the time-scale on which the passage from home to hospital is taking place. The usual concept of day-care is of a rapid turnover of patients on a scale of weeks or months, rather than years, but in Birmingham this short-term concept applies to a mere one-tenth of the day-hospital population, virtually those patients who attend the small hospitals. This has important implications for the planning of future psychiatric services. While it is desirable to visualize a form of short-term day-care, which may be sited in the district general hospitals, it is essential not to neglect the problem of the large group of patients requiring long-term support.

SUMMARY

The 647 patients attending the seven psychiatric day-care facilities in Birmingham were followed up 12 months after the original census date. In the large hospitals nearly two-thirds of the patients were still in day-care; the frequency of their attendance had fallen only slightly during the follow-up period, and those who had been day-patients for the longest time at the census date showed the smallest proportion of discharges. In the small hospitals virtually all census patients had been discharged in the first six months

and only two remained at the end of the year. The present findings indicate that the usual concept of day-care as being a transitional or intermediary stage between hospital and home, of a duration measured in weeks or months rather than years, does not apply to the large majority of Birmingham day-patients.

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