# Towards Chronic Mental Illness

# Patients Staying in Hospital for more than Six Months

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The aim of this study was to examine the factors leading to prolonged stay in hospital of patients admitted with mental disorder. It is part of a larger investigation on the interaction between the services provided for the same area by the psychiatric hospital and the psychiatric unit in the general hospital.

The area selected for the investigation was a densely populated part of North London, formerly known as the East Division of the County of Middlesex, and then divided into the three boroughs of Edmonton, Enfield and Tottenham. The psychiatric service for this area was provided by Claybury Hospital, situated outside its geographical boundaries, and by a psychiatric unit of 34 beds at the North Middlesex Hospital within the area. Until the end of 1960 the psychiatric unit functioned mainly as an observation ward, but about this time its policy changed to one aiming to provide full diagnostic and treatment facilities for any patient admitted. We chose for study the psychiatric admissions in two separate twelve-month periods; the first in the transitional stage of 1960-61, the second three years after the change of policy.

### Метнор

In the survey of all patients admitted to Claybury Hospital from Edmonton, Enfield and Tottenham during the two one-year periods, 1 July, 1960, to 30 June, 1961, and 1 July, 1963, to 30 June, 1964, those who stayed continuously in the hospital for more than six months were studied. The combined population of the area, according to the Census of 1961, was 314,747. It is a population of varied social background: Enfield more prosperous and middle-class; Tottenham predominantly working-class with a sizeable immigrant population; Edmonton, where the North Middlesex Hospital is situated, occupying an intermediate position both geographically and socially.

Patients whose stay in Claybury Hospital was interrupted for the treatment of a medical or surgical condition in a general hospital were considered as under continuous care since admission, i.e. their temporary transfer was not counted as a discharge. Any patient who did not return from leave to a hospital bed before the six-month period was up was not included in the long-stay study, even though not "discharged" within six months. A patient on leave for more than two months was counted as discharged from the beginning of the leave period. Patients transferred to another psychiatric hospital were not considered as discharged, and the total time in the two hospitals was noted. We adopted these rules to give as true a picture as possible of the long-stay population, and therefore our figures do not always correspond to the official hospital returns. After this selection there were 104 patients in hospital for more than six months following their admission in 1960-61, and 82 patients in 1963-64.

Personal and clinical data about these 186 long-stay patients were first obtained from the case-notes and later extended or altered by interview with the patient, if necessary. The diagnosis recorded was reached by a study of the case-notes, an interview with the patient when possible, and discussion with the medical and nursing staff concerned when necessary and possible. In most instances this diagnosis was the same as the one reached originally, but occasionally subsequent events led to an alteration. These diagnoses were placed in one of the following groups:

- Affective Disorder. This included depression of endogenous type at any age and of any duration; acute anxiety state; and any episode of a manic-depressive psychosis.
- Schizophrenia. This group was composed of both acute and chronic schizophrenic illness, including non-organic senile paranoid state and schizoaffective psychosis.
- Organic syndromes. Dementia, epilepsy and subnormality without psychosis, delirious state and/or organic personality deterioration, were placed in this group.
- 4. Personality and Neurotic disorders. This group was composed of conditions reactive to environmental or physical problems and obsessional conditions—e.g. ruminative tension states. It also included chronic neurotic emotional disorders, sexual deviations, non-demented alcoholics and other addicts, and dependent inadequate personalities.

These categories may seem unduly comprehensive. We chose them partly because there is a larger degree of

Table I
Patients Remaining in Hospital for Six Months or Longer

		1960–61					1963–64				
		• .	Ma	les	Fem	ales	Ma	les	Fem	ales	
			Number	Per cent.	Number	Per cent.	Number	Per cent.	Number	Per cent.	
All admissions Patients remaining at:			230	100.0	376	100.0	263	100.0	346	100.0	
Six months			40	17.4	64	17.0	30	11.4	52	15.0	
One year			27	11.7	45	12.0	20	7.6	36	10.4	
Two years			18	7.8	30	8∙o	9	3.4	21	6∙1	
Five years			6	2.6	13	3.2					

agreement on the main groups than for finer diagnostic distinctions, and partly to avoid numbers too small for comparative purposes.

The reason for each patient's prolonged stay in hospital was determined by studying the case-notes and by interviews. The only 1960-61 patients who could be interviewed were those who had remained in hospital for five years. The 1963-64 patients were interviewed at six months, one year, and two years after admission. It was noted whether there was any change since the original assessment in the reason for their continued stay in hospital. The categories described in the results were constructed to include all the reasons for long-stay that were encountered.

# RESULTS

In the period 1 July, 1960, to 30 June, 1961, admissions to Claybury Hospital from Edmonton, Enfield and Tottenham were followed by a stay in hospital of more than six months in the case of 104 patients (17.2 per cent. of 606). In 1963-64 the number fell to 82 (13.5 per cent. of 609). The similar totals for the two periods conceal a rise of male admissions from 230 to 263, and a fall of female admissions from 376 to 346. The

long-stay group of males did not follow this rise, but fell from 40 to 30 (17.4 per cent. to 11.4 per cent.), as did the female group from 64 to 52 (17.0 per cent. to 15.0 per cent.). At one and two years after admission the percentage of 1963-64 patients remaining in hospital continued to fall below those of 1960-61, with the male lower than the female. Six men (2.6 per cent. of male admissions) and 13 women (3.5 per cent. of female admissions) stayed in hospital for more than five years from their admission in 1960-61 (Table I).

A number of patients were admitted more than once in the survey year. Comparison of 1960-61 figures with those for 1963-64 shows that in the second period readmissions have increased for men, and slightly decreased for women (Table II).

The falls in percentages of patients remaining in hospital after six months were due to differing numbers of deaths and discharges (Table III). By five years altogether 9 (22.5 per cent.) of the 40 male patients and 27 (42.2 per cent.) of the

TABLE II

Patients Admitted More than Once During the Survey Year

					M	ale	Fem	ale	Total	
				_	1960-61	1963-64	1960–61	1963–64	1960-61	1963–64
Admissions Persons			• •		230 198	263 214	376 329	346 306	606	609
Readmissions Readmissions	 as pero	entage	of adm	issions	32	49 18·6%	47 12·5%	40 11·6%	527 79 13·0%	520 89 14·6%

TABLE III

Deaths and Discharges Between 6 Months and 2 Years After Admission to Hospital

				1960–61					1963-64				
			-	Ma	ıles	Females		Males		Females			
			-	Number	Per cent.	Number	Per cent.	Number	Per cent.	Number	Per cent.		
All admissions Deaths Discharges	•••	• •		230 7 15	3·0 6·6	376 15	100·0 4·0 5·0	263 6 15	100·0 2·3 5·7	346 12 19	3·5 5·4		

64 female patients who stayed for more than six months had died in hospital.

The long-stay patients will be described at the following stages: at six months for both groups, at one and two years for the 1963-64 group, and at five years for the 1960-61 group.

# At Six Months

Fig. 1 shows the ages of patients still in hospital at this stage. For men there is a tendency to bimodal distribution, and for women the sharp rise in later life is particularly striking, one-third of men and one-half of women patients being 65 or older. This age distribution is probably related to the main forms of mental disorder requiring prolonged hospital care, namely schizophrenia and dementing conditions of old age.

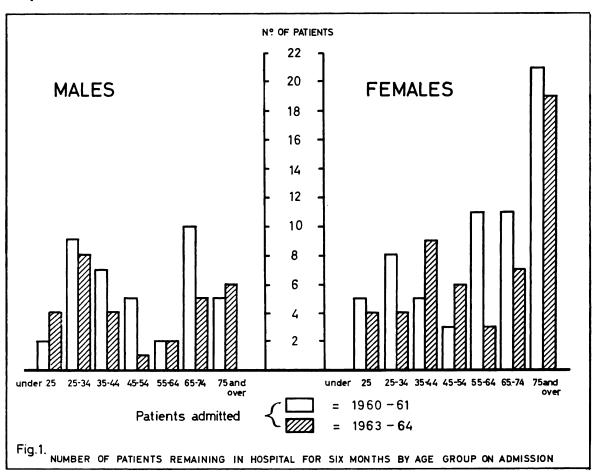
A high proportion of men—over one-third in 1960–61, and more than half in 1963–64—were single. The proportion of spinsters remained constant around one-quarter of the patients. As expected, widowed patients were much more frequent among women.

An attempt was made to define the social class of the patients by occupation, in terms of the Registrar General's classification. This proved particularly difficult for the 1960-61 period, where we had to rely exclusively on the case notes, since many patients were no longer available for interview and often the patient's occupation could not be established. With these reservations the following facts emerged. There were no male patients in either year belonging to social classes 1 and 2. About 40 per cent. of the men belonged to social class 3, and the remainder to classes 4 and 5. For women, the

social classes 1 and 2 were represented in small numbers, so that the first three social classes together constituted nearly one-half of the total long stay female population at the six months stage.

The number of male long-stay patients with no previous admission to a psychiatric bed was 12 (30 per cent.) in 1960-61, and 10 (34.5 per cent.) in 1963-64. The group of patients with three or more previous admissions was a little larger in both years (35 per cent. in 1960-61 and 40 per cent. in 1963-64). Among females almost exactly half of long-stay patients were known (or presumed) first admissions in both years; the second largest group was of those with three or more previous admissions (23.4 per cent. in 1960-61 and 28.8 per cent. in 1963-64).

The pattern of diagnostic distribution was different for the two sexes (Table IV) in both years. More than two-fifths of the males were diagnosed as schizophrenic, and a similar proportion of the females were suffering from organic conditions. The numbers and proportions of patients in these groups were higher in 1960-61 than in 1963-64. Organic conditions were the second largest group in males in both years; similarly schizophrenic illness in longstay female patients was equal second in 1960-61 and third in 1963-64. The number and percentage of personality and neurotic disorders was higher in both cases in the second period. In 1963-64 20 per cent. of the male and 23.1 per cent. of the female patients were in this group, the second commonest diagnosis in the latter. Prolonged treatment in a special unit for neuroses was given to three men in both years; to three women in 1960-61 and five women in 1963-64.



The reasons for long-stay (Table V) were classified as follows:

- 1. Psychiatric. The mental disorder itself was sufficient to warrant the long stay in hospital, e.g. a severe psychosis with slow response to treatment or a severe dementia with incontinence and danger to the patient from wandering, etc.
- 2. Psychiatric complicated by: (a) physical illness or handicap; (b) social problems, e.g. no relatives or accommodation; or, (c) low intelligence.
- 3. Special Treatment. Chronic psychoneurosis treated by long-term in-patient group therapy in a special unit.
- 4. Non-psychiatric. The mental disorder was not sufficient to warrant a long stay in a

mental hospital—i.e. admission prolonged for (a) physical; (b) social; or (c) legal (e.g. restriction order) reasons.

## At One Year

Of the 20 men and 36 women who remained in hospital one year after admission, the reason for long stay had changed between six months and one year for one female and three male patients. Two elderly patients with organic disorder had deteriorated sufficiently to stay in hospital on psychiatric grounds. One 71-year-old man had recovered from the physical illness which had complicated the treatment of his depression, but remained in hospital for social reasons. The fourth patient had developed a physical illness which had increased his hypo-

chondriasis and depression. These four patients were still in hospital at two years.

# At Two Years

Of the 1963-64 group of patients (Table VI) those remaining continuously in hospital were re-examined two years after admission. There were 9 men and 21 women. Their diagnoses on admission were as follows: 6 affective,

9 schizophrenic, 11 organic, and 4 with personality/neurotic disorders. In 25 cases the need for prolonged stay arose from the severity of their mental illness, complicated in ten cases by other factors (physical, social, or low intelligence). There was still one patient receiving group therapy for chronic psychoneurosis, and in four cases the main reason for hospital care was not psychiatric but social.

TABLE IV
Diagnosis of Patients Staying in Hospital for More than Six Months

			1960–61					1963–64				
			Males		Females		Males		Fem	ales		
			-	Number	Per cent.	Number	Per cent.	Number	Per cent.	Number	Per cent.	
All diagnoses			• • • • • • • • • • • • • • • • • • • •	40	100.0	64	100.0	30	100.0	52	100.0	
Affective				5	12.5	12	18.7	3	10.0	7	13.4	
Schizophrenic				18	45.0	12	18.7	12	40.0	10	19.2	
Organic				ΙI	27.5	30	46.9	8	26.7	21	40.4	
Personality/neur	rotic di	sorders		6	15.0	10	15.7	7	23.3	14	27.0	

TABLE V
Reasons for Remaining in Hospital for More than 6 Months

		1960–61					1963–64				
	•	Ma	les	Females		Males		Females			
	•	Number	Per cent.	Number	Per cent.	Number	Per cent.	Number	Per cent.		
All reasons		40	100.0	64	100.0	30	100.0	52	100.0		
Psychiatric		29	72.5	37	57.8	II	36.7	30	57:5		
Psychiatric and other factors		5	12.5	14	21.9	10	33.3	13	25.0		
Special treatment		3	7.5	3	4.7	3	10.0	5	9.6		
Non-psychiatric		3	7.5	10	15.9	3 6	20.0	4	7.7		

Table VI

Age on Admission, Diagnosis on Admission, and the Reason for Hospital Care after 2 Years' Continuous Stay (30 Patients Admitted in 1963-64)

Age				Diagnosis		Reason for hospital care		
Under 45 45–64	•••		11	Affective	6	Psychiatric	15	
45–64	• •	• •	4	Schizophrenic	9	Psychiatric and other factors	10	
65 and over	••	••	15	Organic Personality/neurotic	11	Special treatment Non-psychiatric	1 4	
				disorders	4			

At Five Years

Of the 1960-61 admissions six men and 13 women stayed in hospital for a continuous period of five years (Table VII). When originally admitted the diagnosis of these patients was: 4 affective, 6 schizophrenic, 7 organic, and 2 with personality/neurotic condition. By five years, three patients with affective disorders had recovered but remained in hospital for social or physical reasons; the recovery of the fourth affective disorder and the psychoneurotic condition during the first six months had been followed in the next 4½ years by progressive dementia which required hospital care. At this stage 16 patients were suffering from a mental illness which, with or without additional factors, accounted for their stay in hospital. In the other three cases the mental condition was not the main or sufficient reason for their prolonged care in hospital.

### Discussion

The best general index of length of stay in hospital, considered as a measure of prognosis, is the number of persons out of 100 admissions discharged after specified periods of time (Norris, 1959). Except among the aged death is a relatively rare occurrence (Shepherd, 1957), and the number of patients remaining in hospital after a given lapse of time is also one of the indicators of the severity of the illness as well as a guide for administrative planning.

Comparing the two years studied, the number of patients requiring continued care in hospital was reduced by more than 20 per cent. in the second period. This held good for both sexes, but the reduction was more marked in men; the larger number of women with senile

dementing conditions probably explained this difference. This shortening of stay occurred without an appreciable increase in the total number of admissions. During the second period the general hospital psychiatric unit was admitting and treating patients from the same area; whatever its effect might have been in other respects, it did not lead to a more chronic patient population in the psychiatric hospital. However, the integration of psychiatry into the work of general hospitals requires a re-appraisal of the role of the remaining psychiatric hospitals. One possible solution has been put forward by Orwin (1967).

The patient who stays in hospital for more than six months is generally not middle-aged: for both sexes the peak age periods are before 45 or after 65 years. At six months the typical male patient is an unmarried schizophrenic labourer of about 30, with two or more previous psychiatric admissions. His counterpart is a widow of 75 suffering from senile dementia and with no previous admission. Approximately one-quarter of patients in hospital at this stage were in the group of personality/ neurotic disorders; this recalls the observation of Norris (1959) that of women admitted with behaviour and character disorders only twothirds were discharged by the end of six months and just over four-fifths by the end of two years. The reduction in numbers after the six months stage resulted from discharges more or less uniformly distributed over the other diagnostic categories and the death of a large number of elderly demented women (Table III).

In the vast majority of cases the reason for prolonged stay in hospital was genuinely psychiatric—i.e. the severity of the mental

TABLE VII

Age on Admission, Diagnosis on Admission, and the Reason for Hospital Care After 5 Years' Continuous Stay (19 Patients
Admitted in 1960-61)

Age				Diagnosis		Reason for hospital care			
Under 45 45–64	••		4 8	Affective Schizophrenic	4	Psychiatric Psychiatric and other	10		
45-04	• •	• •	U	beinzopineme	Ū	factors	6		
65 and over	• •	••	7	Organic Personality/neurotic	7	Non-psychiatric	3		
				disorders	2				

disorder whether complicated or not by physical illness, inadequate social support, or low intelligence. At all stages, however, a proportion of the patients—particularly among the elderly—stayed in hospital because of their need for institutional rather than specifically psychiatric care. Thus the over 65s, who constituted a quarter or less of all admissions, represented a third of men and half of women patients continuously in hospital six months later. E. M. Brooke (1963) found a similar trend at the two-year stage. In this respect the psychiatric hospital was still carrying the burden of deficiencies in other parts of the hospital service and in the community.

At all stages of the follow-up, fewer patients remained in hospital from the 1963-64 than from the 1960-61 admissions. Should this trend be confirmed at the five-year stage, the proportion of those remaining continuously in hospital would be well below the 3.1 per cent. observed for the 1960-61 admissions. These changes in the long-stay psychiatric population of the hospital are probably the result of a combination of factors, including new treatments and perhaps more judicious use of older methods, administrative changes in the hospital and progress in the community in the sense of greater tolerance of psychiatric patients and better after-care facilities. The development of an active psychiatric department in the general hospital serving the area may have also lessened the dependence—of the patients and of those responsible for their care—on the protection of the long-stay wards of the psychiatric hospital.

## SUMMARY

Psychiatric patients admitted in 1960-61 and 1963-64 from the same geographical area and

staying continuously in hospital for six months or longer were studied in terms of diagnosis, age, civil state, social class, and reason of their prolonged stay in hospital.

The total number of admissions was similar in the two years, but in the second period the proportion of patients requiring continuous stay in hospital was consistently smaller. Of the 606 admissions in the earlier period 17.2 per cent. were still in hospital after six months, 7.9 per cent. after two years, and 3.1 per cent. after five years. Of the 609 admissions in the second period only 13.5 per cent. remained in hospital after six months, and 4.6 per cent. after two years. The continuing trend towards a reduction of the long-stay population in the psychiatric hospital is confirmed and its significance discussed.

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## References

BROOKE, E. M. (1963). A Cohort Study of Patients First Admitted to Mental Hospitals in 1954 and 1955. London: H.M.S.O.

Norris, V. (1959). Mental Illness in London. Maudsley Monograph No. 6. London: Chapman and Hall.

ORWIN, A. (1967). "The mental hospital: a pattern for the future." *Brit. J. Psychiat.*, 113, 857-864.

Shepherd, M. (1957). A Study of the Major Psychoses in an English County. Maudsley Monograph No. 3. London: Chapman and Hall.

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