

Hospital Work and Family : A Four Year Study of Young Mental Hospital Patients

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INTRODUCTION

While a study of schizophrenia and social class (Goldberg and Morrison, 1963) was in progress, it became obvious that some problems of hospital and community care among young male mental hospital patients should be pursued. Accordingly, it was decided to extend the project to a systematic follow up of the patients admitted to one of the two hospitals included in the study. This paper reports the findings in two parts; Part I relates length of stay in hospital to the severity of a patient's illness and to his circumstances before and after leaving hospital; Part II relates the patient's post-hospital work performance to certain other factors.

THE SAMPLE*

All males under 30 years of age admitted to Hospital A between January, 1958, and December, 1960, whose parents lived in Great Britain were included. The patients were followed up until 31st December, 1961, and the period of observation therefore varies from one to four years. This varying period of observation has disadvantages, but the method imposed by the previous study does mean that a consecutive series of patients were followed over a long period. The mean time under observation was 2 years 8 months. The Appendix Figure shows complete information about all hospital admissions and discharges of the patients in the sample during the survey period, from the first admission to hospital observed on entry to the study—the "key admission"—to the end of 1961.

Diagnosis

Patients were allocated to three diagnostic

*Full details of the sample, of exclusions from it and of the diagnostic criteria adopted are given in Goldberg and Morrison, 1963.

categories, "definitely schizophrenic" (S), "possibly schizophrenic" (PS) or "definitely not schizophrenic" (NS), by psychiatrists at Hospital A. The diagnostic category was reviewed by the psychiatrist of the Social Medicine Research Unit at the end of 1961, and the categories on review are used in this paper. The PS group (16 patients) is omitted from further discussion and only the S and NS groups are considered now.

Age and Civil State

The average age of the S patients on entry to the sample (i.e. on first observed admission to hospital, hereafter called "key admission") is somewhat higher than that of the NS patients (Table I). This is largely explained by the fact

TABLE I
Sample of Consecutive Male Admissions to a District Mental Hospital
Age Distribution by Diagnosis (January 1958—December 1960)

Age	S Patients	NS Patients	Total
15-19	4	9	13
20-24	14	16	30
25-29	34	8	42
Total	52	33	85
Mean age (years)	25	22	24

S = Schizophrenic.
NS = Not Schizophrenic.

that less than half the S patients were first admissions, while about two-thirds of the NS patients were first admissions (Table II).*

Only one of the S patients and five of the NS patients were married on admission to hospital. All the others were single.

*The mean age of S patients whose key admission was their first ever was 23.

TABLE II
*Number of Admissions to a Mental
 Hospital Before "Key" Admission**

Previous Admissions	S Patients	NS Patients
0	23	23
1	12	7
2	7	1
3+	10	2
Total	52	33

*Key admission = The 1st admission observed on entry to the study.

Social Class

The S patients showed the well-known preponderance of unskilled and semi-skilled labourers in the Registrar General's social classes IV and V compared with the average for young men of their age living in the Greater London area. Their fathers had a more balanced class distribution, as had the NS patients and their families; consequently, very few of the parental families were poorly housed, and economic hardship was only apparent in a few families without a regular wage earner.

METHOD

The original study was planned to explore the social background of patients when they were ill in hospital and the parents were naturally the principal informants. Accordingly, the follow up enquiry was directed to the parents or other key relatives rather than to the patients themselves.

Follow-up visits were paid, starting with the earliest admissions in the sample, to all the families irrespective of whether the patients were in or out of hospital. It was left to the discretion of the parents to tell the patient of the visit. Many parents of patients who were well, and working felt that it was best not to mention the visit, and these patients were not seen as a rule. Most patients who were not well and not at work were seen, whether they were at home or in the hospital. During the home visit the patient's mental state, his work, leisure activities and social relationships were discussed. The attitudes of the relatives were explored and often observed. Detailed questions were asked about the kind of attention and help patients had received after discharge, for example from

outpatient clinics, general practitioners, psychiatric social workers at the hospital, the mental welfare officers of the local authority health department, and the disablement resettlement officers at the employment exchange. A separate check was carried out with these various agencies to ascertain how much contact they actually had with the patients.

Refusals

Three parents refused outright to co-operate. Of these, two whose sons were doing well did not wish to be reminded of the painful episode. In both cases confirmatory information was obtained from the G.P. Another mother gave a good deal of information by letter but declined to see the interviewer on account of the patient's difficult and suspicious behaviour. In this case up to date information was available from the mental welfare officers. Three parents whose sons had been in hospital throughout the survey period kept postponing the interviews, though two were prepared to talk at length on the telephone. Thus, the refusals were of two kinds; those whose sons were doing well and who preferred to "forget"; and those whose sons continued to be very ill and who presumably could not face further discussion of a seemingly hopeless situation.

PART I—FACTORS RELATED TO LENGTH OF STAY IN HOSPITAL

In recent years there has been a substantial decrease in the length of time patients spend in mental hospitals. Half the male patients discharged in 1951 in England and Wales had been in hospital 2.2 months or less; by 1960 this median stay for males had fallen to 1.4 months. (R.G., 1958, 1964).

The proportion of schizophrenic patients remaining in a mental hospital for two years or more has decreased from 60 per cent. for those admitted in 1930 to between 10 per cent. and 15 per cent. for those admitted after 1955. (Brown, 1960; Brown, 1963). During the same period re-admissions nearly doubled and for schizophrenic patients they have trebled.

Brown, (1960), in his review of studies related to length of hospital stay and schizophrenia, discusses some of the social factors affecting

discharge. Age on admission and frequency of re-admission seem to be correlated with length of stay in hospital. Older schizophrenic patients have a greater chance of becoming chronic. Re-admitted patients also tend to stay longer. Social isolation seemed to play a part in chronicity; single patients stay longer than married ones; patients lacking contact outside the hospital tend to become chronic more frequently than those who have relatives or friends who keep in touch with them.

Several studies in America (Hollingshead and Redlich, 1958; Hardt and Feinhandler, 1959) and Brooke's study (1957) in this country have shown an association between occupational level on admission and length of stay in hospital—the lower the social grade, the longer the stay in hospital. However, other work in this country (Goldberg and Morrison, 1963; Wing *et al.*, 1959) and in Norway (Ødegaard, 1962) does not confirm this association.

Recently Monck (1963) found a significant relationship between the schizophrenic's work record after discharge and length of stay in hospital. The longer the patients stayed in hospital, the poorer their work record.

All these social factors bearing on length of stay in hospital are additional to the extensive social and therapeutic changes inside the hospital which clearly exert a profound influence on length of stay and discharge policies. Brown (1960) therefore concludes his study by saying that "today there seems less justification for using discharge as a criterion of successful outcome". . . . "Discharge is a social process in which the patient's clinical position is only one, even if the most important, factor."

RESULTS

It must be pointed out that this is a detailed clinical study of a comparatively small number of patients. In the results that follow, numbers are too small for significance tests and can therefore only be used to suggest some hypotheses that may be testable in larger studies designed for this purpose.

Length of Stay in Hospital and Severity of Illness

The S patients fared worse than the NS

patients. Not only did they stay longer in hospital during their key admission* (Table III)

*It has been pointed out (Table II) that of the 52 schizophrenic patients, the key admission was the first-ever admission for 23 patients and a subsequent admission for 29. Comparison of the number of re-admissions, duration of stay in the key admission and total time spent in hospital during the survey period showed considerable similarity between the two groups (Tables A, B and C). This result is not a function of the varying periods under observation, as can be seen from the diagram (Appendix I). The two groups have therefore been amalgamated in the subsequent results.

TABLE A

S Patients

Re-Admissions after Key Admission up to December 31, 1961

Re-admissions after "Key" Admission	Key Admission	
	1st Ever	Other
0	8	11
1	6	8
2+	5	5
Did not leave hospital	4	5
Total	23	29

TABLE B

S Patients

Length of Key Admission (Months)

Months	Key Admission	
	1st Ever	Other
Less than 3	5	9
3-5	7	9
6-11	6	1
12+	5	10
Total	23	29
Mean stay (Months)	12	12

TABLE C

S Patients

Total Length of Spells in Hospital to December 1961 (Months)

Months in Hospital	Key Admission	
	1st Ever	Other
0-2	2	6
3-5	3	2
6-11	8	6
12+	10	15
Total	23	29
Mean stay (Months)	15	16

TABLE III
Length of Key Admission (Months)

Months	S Patients	NS Patients	Total
Less than 3 ..	14	14	28
3-5 ..	16	12	28
6-11 ..	7	5	12
12+ ..	15	2	17
Total ..	52	33	85
Mean Stay (months) ..	12	5	

—their mean duration of stay being twice as long as that of the other group—but nearly two-thirds of them were either re-admitted or never left hospital at all during the survey period, compared with a quarter of the other patients. (Table IV). Nearly half of the 52 S patients spent over a year in hospital during the

TABLE IV

Re-Admissions after Key Admission up to December 31, 1961

Re-Admissions after "Key" Admission	S Patients	NS Patients	Total
0 ..	19	24	43
1 ..	14	4	18
2+ ..	10	4	14
Did not leave Hospital ..	9	1	10
Total ..	52	33	85

survey period (Table V), while only a small proportion of the other patients did so. Nine of the patients did not leave hospital at all; all these had been there longer than two years by the end of 1961.

The question arises how length of stay is related to the severity of the illness. Schizophrenia is the most serious disease from which this group of young patients suffered, and on average, as said, the S patients spent much more time in hospital than the other patients. *Within* the schizophrenic group it is difficult to ascertain how length of stay and number of re-admissions are related to severity of illness, since no specific assessment was made on discharge of the patients except the traditional one of "recovered",

TABLE V

Total Length of Spells in Hospital to December 1961 (Months)

Months in Hospital	S Patients	NS Patients	Total
0-2 ..	8	11	19
3-5 ..	5	12	17
6-11 ..	14	5	19
12+ ..	25	5	30
Total ..	52	33	85
Mean Stay (months) ..	16	7	12

"improved", "not improved" and the patients' mental state at follow-up could only be described according to the reports given by relatives or observation of the patients themselves. Omitting the patients who were in hospital at the time of the follow up (18), it appeared that those who showed pronounced symptoms (were actively deluded and either very withdrawn or extremely disturbed and excitable) spent more time in hospital and were re-admitted more often than those who were reported to be free of symptoms. However, the differences were by no means striking (Table VI) and they disappeared if "no re-admission" was taken as a criterion of comparison. About half of the patients in each of the three approximate clinical categories shown in Table VI were not re-admitted to hospital during the survey period. This finding serves as a reminder that reduction in re-admissions is by no means

TABLE VI
Mean Length of Total Spells in Hospital, Number of Re-Admissions and Mental State at Follow Up

Mental State	S Patients				NS Patients			
	No. of Pts.	Mean Length total stay (months)	Mean % of time at risk *	Mean No. of Re-admissions	No. of Pts.	Mean Length total stay (months)	Mean % of time at risk *	Mean No. of Re-admissions
No evidence or report of symptoms	12	7	23	0.5	21	4	15	0.1
Some evidence or report of symptoms	14	12	32	1.2	2	2	4.5	0
Evidence of pronounced symptoms	8	9	31	0.9	1	10	25	2
Total	34	9	28		24	4	15	
In hospital at follow up	18				5			
Deceased	—				1			
N.K.	—				3			
Grand Total	52				33			

*Mean per cent. time at risk.

For each patient the total time spent in hospital was expressed as a percentage of total time at risk. The figures in the columns are the means of the percentages for the group concerned.

TABLE VII
Mean Length of Total Spells in Hospital and Work History before Key Admission (From Leaving School or Place of Training)

Work history	S Patients			NS Patients		
	No. of Pts.	Mean Length total stay (months)	Mean % of time at risk *	No. of Pts.	Mean Length total stay (months)	Mean % of time at risk *
+	23	10	31	19	5	18
o	20	19	54	10	5	15
-	7	20	64	4	24	71
School	2	23	83			
Total	52	16	47	33	7	23

+ = In regular work until shortly before key admission.

o = Lengthy periods of unemployment.

- = Very little or no work.

*See footnote to Table VI.

synonymous with an improvement in clinical state.

Since there was only one patient in NS group who was seriously ill and disturbed at the time of follow-up, the relationship between length of stay and re-admission and severity of illness cannot be usefully explored in this group.

Length of Stay and Work History Before Admission

The patient's work record from the time he started work till his key admission bears some relationship to duration of stay (Table VII) in both groups (S and NS). Those in regular work until shortly before the key admission spent much less time in hospital than those who had done little or no work. This tends to confirm that good social functioning and a relatively sudden onset of mental illness is a good prognostic sign, while poor social functioning expressed by lengthy periods of unemployment or inability to work at all is a poor prognostic sign and probably signifies a long insidious onset of the disease.

Length of Stay and the Home Environment before Admission

An examination was made of the relationship between certain family constellations often found in the home background of schizophrenic patients and length of stay in hospital. The familiar difficulty of measuring subjective phenomena which different observers can interpret in different ways was tackled by basing the measurement of the family circumstances on the presence or absence of objective evidence of the following unfavourable features during the last five years before the patient's key admission to hospital:

1. Mental illness and/or severe neurotic disturbance in a relative with whom a patient was living.
2. Evidence of severe marital stress between the patient's parents.
3. Evidence of a disturbed mother/son relationship (strong hostility, ambivalence as well as marked over-protection).

4. Evidence of a disturbed father/son relationship (strong hostility, ambivalence, as well as marked over-protection).
5. Evidence of disturbed sibling relationship (strong hostility, excessive rivalry).
6. Death or absence of one parent.

These factors had emerged in the case studies as the most important sources of disturbance in the families of schizophrenic patients. Factors 1 to 5 are commonly identified as pathogens in family relationships; the 6th was included because the death or absence of one parent which left the schizophrenic patient in close contact with the other seemed to have a particularly disturbing effect on the patient. If a parent had re-married the patient was not rated for this factor.*

Both S and NS patients show a smooth gradient of increasing time in hospital according to the number of unfavourable home factors (Table VIII). However, among the S patients, those with no unfavourable factors spent only a slightly lower percentage of their period of observation in hospital than patients with one factor (27 per cent. compared to 33 per cent.) in their environment. Seven of the eight patients with no unfavourable factors spent a mean percentage of 16 per cent. of the time at risk in hospital, and one 100 per cent. of the time. This patient, though much improved, refused to go home, maintaining that he would become ill again if he did so. Although there were many indications that all was not well in this family—the father was clearly a liar and rudely refused a follow-up visit—no objective evidence could be obtained and the family had to be rated as “no unfavourable factors”.

When the presence or absence of unfavourable home factors was compared with the numbers of re-admissions it was found that frequent

*The rating was carried out by the writer in consultation with a colleague who had not been involved in the clinical study. A factor was considered to be present if the colleague could clearly discern it from the case material. Secondly, the consultant psychiatrist to the Social Medicine Research Unit carried out an independent rating on the basis of the written case material. The agreement between the three raters on the presence of the various unfavourable factors was 83 per cent. After discussion, agreement on all cases was reached. (For anchoring examples illustrating factors 1 to 5 see appendix II).

TABLE VIII
Mean Length of Total Spells in Hospital and Home Circumstances before Key Admission

Home Circumstances: No. of unfavourable factors	S Patients			NS Patients		
	No. of Pts.	Mean Length total stay (months)	Mean % of time at risk *	No. of Pts.	Mean Length total stay (months)	Mean % of time at risk *
0	8	7	27	10	4	11
1	9	11	33	7	6	25
More than 1	34	19	54	15	10	30
Unclassifiable	1	—	—	1	—	—
Total	52	16	47	33	7	23

*See footnote to Table VI.

re-admissions are strongly associated with unfavourable home factors. Eight of the ten patients in the S group who were re-admitted twice or more had two or more unfavourable home factors as against 7 of the 19 not re-admitted during the survey period.

Length of Stay and Work History after Discharge from Key Admission

Table IX shows that those S patients who worked most of the time when out in the community spent hardly any less time in hospital than those who did practically no work at all, while those who worked about half the time spent

the longest period in hospital, both proportionately to the time at risk as well as in actual length. This is in contrast to Monck's (1963) findings of a consistent correlation between the length of stay and time at work after discharge.

Examining in more detail the length of stay of the 14 schizophrenic patients who worked 75 per cent. or more of the time while out of hospital, the following facts emerge: eight spent less than 25 per cent. of the time at risk in hospital, two between 30 and 40 per cent. and four patients spent over 40 per cent. of the time at risk in hospital.

Three of these latter four patients worked from hospital for many months before facing a

TABLE IX
Mean Length of Total Spells in Hospital and Work History after Key Admission†

Work Rating	S Patients			NS Patients		
	No. of Pts.	Mean Length total stay (months)	Mean % of time at risk *	No. of Pts.	Mean Length total stay (months)	Mean % of time at risk *
1	14	10	29	21	5	17
2	15	13	40	7	6	16
3	14	11	37	2	19	61
Total	43	11	35	30	6	20

1 = Working 76-100 per cent. of the time out of hospital.

2 = Working 25-75 per cent. of the time out of hospital.

3 = Working less than 25 per cent. of the time out of hospital.

†One NS and nine S patients who never left hospital, one NS patient who went to prison three weeks after discharge as well as one NS patient whose work record was not ascertainable have been excluded.

*See footnote to Table VI.

very precarious environment outside, and the fourth, who had found a job immediately on discharge was pushed back into hospital by his anxious father as soon as he showed signs of disturbance, though still at work.

The comparatively long stay in hospital of patients who performed well after discharge is partly explained therefore by the fact that some, especially those with home difficulties, used the hospital as a kind of halfway house or rehabilitation centre from which they were able to establish firm habits of work before facing a difficult outside world.

Why those S patients who hardly worked at all after discharge have on average a comparatively short duration of stay is fairly clear. Four of the 14 actually spent over three-quarters of the time at risk in hospital and remained very ill, and a fifth, though nominally resident for less than 30 per cent. of the time at risk, remained a day patient to the end of the survey period. Seven patients who spent less than 30 per cent. of the time at risk in hospital discharged themselves against medical advice when still very ill. They remain virtually unemployable and in need of further treatment and rehabilitation. This leaves only two patients fairly well adjusted socially who stayed in hospital less than 30 per cent. of the time at risk and had done no work up to the time of the follow-up visit. One had not worked for 7 years, yet it only needed an introduction to the Disablement Resettlement Officer to get him started. By the end of the survey period he was doing well in an Industrial Rehabilitation Unit, and subsequently he worked regularly in a semi-skilled job. The second patient produced formidable defences against any suggestion of work and had not been to work by the end of the survey period. Thus, the comparatively short stay in hospital of those who did not work after discharge is largely explained by premature discharge against medical advice. There also emerged an additional home factor of over-protection and antagonism to hospital treatment which will be discussed in a later paper.

Only two NS patients did no work at all and both were very sick individuals. One patient with an organic psychosis spent most of the survey period in hospital; the other, a psychopath with

paranoid and schizoid features, made a serious attempt at suicide and never stayed in hospital long enough to benefit from rehabilitative measures. Both were re-admitted twice within the survey period.

It was noted that the schizophrenic patients who did best were those who had been re-admitted once (9 out of the 14 re-admitted once worked most of the time they were out in the community and only 2 did practically no work at all). It may be that a short stay in hospital and no re-admission on the part of S patients is not necessarily equated with good recovery or satisfactory performance in the outside world. A considerable proportion of the patients who did not return to hospital needed further treatment and rehabilitation. It may be argued that timely re-admission to hospital coupled with active treatment and rehabilitation offers better chances of remission than long periods of inactivity at home.

Length of Stay and Home Environment after Discharge

Brown and his colleagues (1959, 1962, 1963) in this country and Freeman and Simmons (1963) in the United States have shown that the schizophrenic patient's ability to function in the community is related to the kind of living group to which he is discharged and the relationships prevailing in it.

Table X suggests that patients (whether schizophrenic or not) who go home to parents spend more time in hospital than patients who go into lodgings or live with wives. However, this finding must be treated with great caution, as numbers are very small indeed. Simmons and Freeman (1959) have interpreted similar findings as indicating the patient's response to environmental expectations. Parents' expectations are low and there is thus perhaps less incentive for the patients to leave hospital and become independent, while the responsibilities of marriage and the expectations of strangers might spur the patients on to renewed efforts.

Not unexpectedly in view of Brown *et al.*'s findings (1962), length of stay was related to the nature of the family environment to which the patient returned (Table XI). Schizophrenic

TABLE X
Mean Length of Total Spells in Hospital and Living Group on Discharge from Key Admission†

Living group	S Patients			NS Patients		
	No. of Pts.	Mean Length of Total stay (months)	Mean % of time at risk *	No. of Pts.	Mean Length total stay (months)	Mean % of time at risk *
Parents	32	11	35	17	8	29
Wife	2	6	16	10	3	12
Other relatives	4	22	62	—	—	—
Lodgings	5	9	23	5	5	13
Total	43	11	35	32	6	21

†One NS and nine S Patients who never left hospital during the survey period have been excluded.

*See footnote to Table VI.

TABLE XI
Mean Length of Total Spells in Hospital and Home Circumstances after Discharge†

Home Circumstances: No. of unfavourable factors	S Patients			NS Patients		
	No. of Pts.	Mean Length of stay (months)	Mean % of time at risk *	No. of Pts.	Mean Length of stay (months)	Mean % of time at risk *
0	8	5	14	11	4	13
1	6	13	39	7	7	21
more than 1	24	14	44	8	10	39
N.K.	—	—	—	1	2	5
Total	38	12	37	27	6	23

†Nine S patients and one NS patient who never left hospital and five S and five NS patients who went into lodgings have been excluded.

*See footnote to Table VI.

patients who did not experience any unfavourable factors in the family environment on discharge stayed longer out of hospital than those who experienced stressful factors, and it did not seem to matter whether there were one or more unfavourable factors. In the NS group a clear gradient is apparent.

Long-Stay Patients

The nine schizophrenic patients who stayed in hospital throughout the survey period are of particular interest in relation to the three factors examined—severity of illness, work record and

home circumstances. Two of the nine patients went out to work regularly from the hospital and were socially quite adjusted. Others varied considerably in their mental condition, but they were no more ill than ten of the patients who had been discharged to their parents and who were deluded, restless, unable to work, spending long periods lying in bed and not speaking to anybody. Why then were these nine patients in hospital throughout the period while the others were home with their families, at any rate for some time? The two patients who were working steadily from hospital refused to go home to what clearly were disturbing family situations

to them. The home situations seem to offer one clue as to why some patients stay on in hospital while others can be discharged. For example, seven of the nine patients had no fathers at home and five of the seven developed very hostile attitudes to their mothers prior to admission. Three refused to sleep at home during week-end leave, though they were prepared to go home for the day. It may be that in these nine cases the family situations were too difficult for the patient to face. Conversely, the widows especially were too uncertain and frightened to cope alone with the patient at home. There seemed a tacit agreement between parents and patients to continue the status quo: and this was by no means based on wholly negative attitudes. The parents of all these patients were devoted visitors and did not neglect the patients.

There is thus a suggestion that a very prolonged hospital stay is related not only to the persistence of the illness but also to unfavourable home circumstances which may have a rather specific character in the S group. A paper is being prepared on the family circumstances of the S and NS patients and will describe the nature of the disturbances which constitute these unfavourable factors (Goldberg, 1966).

PART II—WORK PERFORMANCE AFTER DISCHARGE

It was shown in Part I that a patient's work record was related to the length of time he spent in hospital. Prolonged unemployment before admission was associated with a long stay; yet a long period in hospital, which often included industrial rehabilitation, was not necessarily predictive of a poor work performance after discharge.

Since in our society a man's ability to work consistently is one of the best indicators of effective social functioning, it is important to ask what factors contribute to success at work after discharge. Work habits established before the illness? The help a patient receives in finding suitable work? His mental health? His living conditions and interpersonal relationships? An attempt was made to explore these questions.

RESULTS

Pre-admission Work Record and Performance after Discharge

As one would expect, a strong relationship exists between work performance before and after hospital discharge (Table XII). The majority of patients who worked for most of the time after discharge also had a good work record before it. In the NS group the converse is also true. Practically all the patients who had a good work record before admission also did well afterwards. However, only half of the 23 schizophrenic patients whose employment record was good before their key admission did well after discharge. Seven worked for about half the time and four did no work at all.

Considering the crippling nature of this illness, these findings are reasonably encouraging, especially since there were hardly any opportunities for sheltered employment in the area.

The outlook for those schizophrenic patients who had had an unstable employment record (O) before admission was much worse. Of the 20 patients in this category only one did well after discharge. Twelve did either little or no work at all after discharge or stayed in hospital throughout the survey period. Worst of all were the chances of those who had done little or no work before hospitalization. None of them were able to work consistently.

It is of interest that five NS patients had a better employment record after hospitalization than before. For several of them, admission to hospital was the culmination of a crisis; on discharge they made greater efforts to work steadily, helped in at least three instances by the support of a steady girl friend.

Continuity between Treatment and Work

The ways in which patients found employment or were prepared for their work were studied in relation to their performance. Table XIII shows that finding employment was a very haphazard affair. Similar findings are reported by Mandelbrote in a Gloucestershire follow-up study (1964) and by Dudgeon (1964) in Northern Ireland. Only 9 obtained

TABLE XII
Work Record before and after Key Admission

Pre-Admission Work Record	Post Admission Work Record																
	S Patients					NS Patients					Both Groups						
	1	2	3	X	Total	1	2	3	X	NK	Total	1	2	3	X	NK	Total
+	12	7	4	—	23	16	2	—	—	1	19	28	9	4	—	1	42
o	1	7	7	5	20	5	5	—	—	—	10	6	12	7	5	—	30
—	—	1	3	3	7	—	—	2	2*	—	4	—	1	5	5	—	11
School	1	—	—	1	2	—	—	—	—	—	—	1	—	—	1	—	2
Total	14	15	14	9	52	21	7	2	2	1	33	35	22	16	11	1	85

Pre-Ad. Work Record: + = In regular work until shortly before key admission.
o = Lengthy periods of unemployment.
— = Very little or no work.

Post Ad. Work Record: 1 = Working 76–100 per cent of the time out of hospital.
2 = Working 25–75 per cent. of the time out of hospital.
3 = Working less than 25 per cent. of the time out of hospital.
X = Never left Hospital during survey period.

*One NS patient included as X went to prison for the rest of the survey period 3 weeks after discharge.

employment through the Disablement Re-settlement Officer, compared to 15 through the ordinary vacancy section of the Labour Exchange. The D.R.O.s explained that they were often very puzzled by the problems presented by the schizophrenic patients, and also by the doctors who considered them “fit for

work”. To the majority of D.R.O.s, even partially recovered schizophrenic patients seemed hopeless propositions, and they were not prepared to risk the goodwill of potential employers of disabled persons by placing these very unpredictable people with them. Less than a fifth of the whole sample were able to return to their old jobs, which is not surprising since many of them were in semi or unskilled employment. Unofficial sources such as relatives, friends, newspapers, account for a quarter of the jobs obtained.

Two factors stand out in relation to performance: those who did best among the S patients, that is to say worked steadily in one job, either returned to their old employment or had their work arranged while still in hospital. The NS patients were much better able to find their own jobs. Secondly, and perhaps most importantly, those patients who worked for 75 per cent. or more of the time they were out in the community started their jobs during the first month after discharge. This applied to both the S and NS group. A follow-up study in Edinburgh (Renton *et. al.*, 1963) also showed how important it is for the schizophrenic patient to have a job to go to. The majority of those who

TABLE XIII
Method of Obtaining First Job after Key Discharge

Method	S Patients	NS Patients	All
Return to old job	8	6	14
Labour Exchange (Vacancy Section)	5	10	15
Labour Exchange DRO	6	3	9
Relatives, Friends, Misc. Contacts	6	6	12
Newspaper Advert	5	3	8
Trade Union	2	—	2
N.K.	3	2	5
Total	35	30	65
Never worked since key admission	17	3	20
Grand total	52	33	85

worked about half the time they were out in the community took much longer to get started. The Edinburgh investigators made similar observations. This difficulty of finding work soon after discharge is partly related to the patients' mental health. Only three of the 15 patients in this group were free of symptoms on follow-up (see Table XV below). However, there is also evidence in the case histories that many were left to their own devices on leaving hospital. For example, one young man tried hard with support from his family to find a clerical job and eventually obtained one through a local paper. He was dismissed after six months as being too slow. It took the family another six months of diligent searching to find another much simpler job as a messenger which the patient was able to keep for over a year. Others had to wait a long time for vacancies in an Industrial Rehabilitation Unit; some tried quite unsuitable jobs which they quickly lost, and still others settled down at home not bothering to find work until some pressure was exerted by their relatives. These observations confirm what many clinicians know from experience, that smooth and continuous transition from treatment through rehabilitation to work is of crucial importance in the successful resettlement of the withdrawn and inactive schizophrenic patient.

The Patient's Mental State and Work

It might be considered obvious that work performance is related to the patient's mental

health. However, this relationship was not as straightforward and simple as one might imagine. First: as already mentioned in Part I of this article, it was not possible to assess accurately the state of the patient's mental health on discharge, as only the broad categories of "recovered", "improved" and "not improved" were used, and most patients in the sample were discharged with the label "improved". A detailed description of the patient's state of mental health was obtained from the relatives at follow-up, and in a number of cases the patient himself was seen. According to these descriptions and/or the investigator's observations, the impressions that emerged were as summarized in Table XIV. (See also Table VI). As will be seen, 12 S patients, about a quarter, were reported to be symptom-free as were two-thirds of the NS patients. However, even among those S patients who were said to be symptom-free, the adjustment was somewhat precarious. Most of them led rather solitary, circumscribed lives with few leisure interests, spending most of their evenings at home. At work they just managed to hold on to semi-skilled jobs where they experienced little pressure and where little initiative was required. With one exception, none showed any signs of rising to higher positions in their careers. On the contrary, as has been shown in a previous paper (Goldberg and Morrison *op. cit.*) most of them were performing at a lower level than they had done before their first attack. In the NS group a

TABLE XIV
Mental State at Follow Up

Mental State								S	NS	Both	
								Patients	Patients	Groups	
At Home:											
No evidence or report of symptoms or disturbance—								Well	12	21	33
Some evidence or report of symptoms or disturbance—								Not	14	2	16
Evidence of pronounced symptoms—								Well	8	1	9
In Hospital at F.U.:											
Not left hospital	9	} 18	} 5	23
Re-admitted	..	..	..	..	..	..	..	9		
Deceased	..	..	..	..	..	..	..	—	1	1
Not known	—	3	3
Total	..	..	..	..	..	..	..	52	33	85

TABLE XV
*Mental State at Follow Up and Work History after Discharge from Key Admission**

Work Record	S. Patients				NS Patients					Both Groups				
	Well	Not Well	Readm. Hosp.	Total	Well	Not Well	Readm. Hosp.	Decd. N.K.	Total	Well	Not Well	Readm. Hosp.	Decd. N.K.	Total
1	7	4	3	14	19	1	1	—	21	26	5	4	—	35
2	3	8	4	15	2	1	2	1	6	5	9	6	1	21
3	2	10	2	14	—	1	1	—	2	2	11	3	—	16
Not Known	—	—	—	—	—	—	—	3	3	—	—	—	3	3
Total	12	22	9	43	21	3	4	4	32	33	25	13	4	75

1 = Working 76–100 per cent of time out of hospital.

2 = Working 25–75 per cent. of time out of hospital.

3 = Working less than 25 per cent. of time out of hospital.

*The one NS patient and nine S patients who never left hospital have been excluded from this analysis.

high proportion of those who were reported to be symptom-free and doing well were either married or well on the way, and thus were leading fuller social lives.

While being symptom-free, i.e. “well”, is practically synonymous with being at work in the NS group (Table XV), this is not quite so in the S group. Thus, two S patients had not worked at all, although they seemed reasonably well and active, and four S patients had worked most of the time they were out of hospital, although their mental state was very precarious, that is to say, they were in the “not well” group.

One of these four patients, (S.1), a shipwright going on fortnightly voyages, had kept this occupation for well over a year. Whenever he was at home he had florid delusions, maintaining that the living room was wired up, and he kept his brothers and sisters awake until the early hours of the morning in order that they should help him to combat these evil influences. Another (S.10) worked regularly as a labourer, starting early in the morning. He led a very isolated life within his family, never joining in their activities. He was involved in a very intensive and ambivalent relationship with his mother; he occasionally attacked her, with the result that she called in the police. His mother got up at five every morning to cook his breakfast and see him off to work, and she practically drove him there whenever he felt inclined to take a day off. She also kept a firm eye on his medication and outpatient attendances. The third patient (S.18), who is subnormal as well as schizophrenic, was also supervised closely by his mother, who saw that he took his drugs regularly, got him to his roadsweeping job at the right time, and so on. The fourth patient (S.20) stuck an uncongenial job as a glass-bender in which he had worked from hospital for over a year. He was acutely aware of

his deficiencies, complained about his poor performance, and speculated about grandiose abstract schemes which he was unable to translate into reality. He refused to see his doctor or to take his drugs, though he complained of feeling very ill. Here, too, a continual battle was raging between him and his mother.

The remarkable feature was that, although these patients showed frankly psychotic and often very violent behaviour at home, they seemed to be able to control these feelings to a certain extent at work. Other investigators (Monck, 1963; Brown, 1963) report similar findings.

The “Living Group” and Work

Over two-thirds of the S patients and about half of the other patients went back to their parental homes on discharge (Table XVI). Only two S patients had wives, whereas nearly a third of the NS patients were married and living with their spouses on follow-up. Relating the patient's performance at work to the type of living group to which the patient returned (Table XVI) indicates that the S patients who returned to their parents did considerably worse than those in lodgings. Only 16 of the 32 who returned to their parents were actually at work at follow-up compared to all five of those who had gone into lodgings or residential jobs. Reviewing the patient's work performance *throughout* the survey period rather than at the point of follow-up only shows that in both

TABLE XVI

*Living Group after Discharge from Key Admission and Subsequent Work History**

Living Group	Work Record													
	S Patients				NS Patients				Both groups					
	1	2	3	Total	1	2	3	NK	Total	1	2	3	NK	Total
Parents	7	11	14	32	11	3	2	1	17	18	14	16	1	49
Wife	1	1	—	2	7	2	—	1	10	8	3	—	1	12
Other relatives	1	3	—	4	—	—	—	—	—	1	3	—	—	4
Lodgings	5	—	—	5	3	2	—	—	5	8	2	—	—	10
Total	14	15	14	43	21	7	2	2	32	35	22	16	2	75

1 = Working 76–100 per cent. of time out of hospital.

2 = Working 25–75 per cent. of time out of hospital.

3 = Working less than 25 per cent. of time out of hospital.

*The one NS patient and the nine S patients who never left hospital have been omitted from this analysis.

groups those who had done practically no work at all lived at home with their parents. Patients who lived with wives, other relatives or in lodgings had worked at least half the time they were out in the community. These findings confirm work carried out in Boston and in England (Freeman and Simmons, 1963; Brown, 1959; Monck, 1963). Renton *et al.* (*op. cit.*) also comment on the high rate of unemployment among the S patients living with their parents. The NS patients seemed to work equally well wherever they lived, though it is noteworthy that the only two patients who hardly worked at all lived with their parents.

The question arises whether those patients who can maintain themselves in lodgings or other residential jobs were better "risks" to begin with than those who returned to their parents where they could continue to live without working. This is not borne out by the evidence in this small sample. One S patient (S.1), the shipwright already described, continues to suffer from severe delusions. Another patient who worked very successfully as a porter for two years in lodgings had had seven admissions in 12 years. Two further patients in lodgings were re-admitted to hospital during the survey period and returned to their lodgings.

On the other hand, two patients who eventually returned to their parents from lodgings have remained at work.

Home Situation and Work

Following on the suggestion that the type of living group is related to the patient's success or failure in the community, further analysis looked for any association between the ability to work consistently and either favourable or unfavourable forces operating in the home environment. The post-hospital family environment was assessed by noting the presence or absence of the unfavourable factors already referred to in the first part of the Follow-Up Study. The relationship between adverse factors in the home environment and work performance was only studied among those who actually went to live with relatives, that is to say, 38 S patients and 25 NS patients. Twenty-four, or about two-thirds, of the S patients experienced two or more adverse factors in their home environment as against roughly one-third in the NS group (Table XVI). At first sight there seems little relationship between work record and adverse home conditions. However, closer scrutiny reveals some differences both within the S group and between the S

TABLE XVII

*Unfavourable Home circumstances and Work History after Discharge from Key Admission among 38 S and 27 NS Patients Who Returned to Relatives**

Home Circumstances: No. of Unfavourable Factors.	Work Record														
	S Patients					NS Patients					Both Groups				
	1	2	3	NK	Total	1	2	3	NK	Total	1	2	3	NK	Total
0	4	3	1	—	8	9	2	—	—	11	13	5	1	—	19
1	1	2	3	—	6	4	2	1	—	7	5	4	4	—	13
More than 1	4	10	10	—	24	5	1	1	1	8	9	11	11	1	32
NK	—	—	—	—	—	—	—	—	1	1	—	—	—	1	1
Total	9	15	14	—	38	18	5	2	2	27	27	20	16	2	65

*All the 10 patients who never left hospital had homes with unfavourable factors.

- 1 = Working 76-100 per cent. of time out of hospital.
- 2 = Working 25-75 per cent. of time out of hospital.
- 3 = Working less than 25 per cent. of time out of hospital.

and the other diagnostic group. For instance, of those S patients who had favourable home conditions (8) half performed well at work, but of those with bad home conditions (24) only four succeeded.

The picture is different in several respects in the NS group. Only one-third of the men (8) experienced two or more adverse factors in their home environment but over half (5) of these managed to work consistently as against one-sixth in the S group. These NS patients showed signs of strain but had compensatory outlets in their leisure time. Two had permanent girl friends, another belonged to a club, and the fourth also was a sociable boy with many outside interests. The S men had no outlets or interests that could become an effective barrier between them and their traumatic environments.

SUMMARY AND CONCLUSIONS

Following a consecutive series of male admissions under 30 from their admission to a district mental hospital for a mean period of 32 months, length of stay in the mental hospital was related to severity of illness, to work performance before and after hospital admission and to home circumstances before and after admission.

Since this was a detailed clinical investigation, numbers have been too small for proper statistical treatment or for studying the effects of two

or more factors in combination. Nevertheless, the findings are in general agreement with other work and point to the need for further studies of young schizophrenic patients. In Part I it was shown that:

1. Severity of illness was of importance in distinguishing the schizophrenic patients from patients suffering from other conditions.
2. Those who had been in regular work until shortly before admission spent a considerably shorter period in hospital than those who had worked very little or had long spells of unemployment.
3. There was no direct relationship in the schizophrenic group between the patients' work performance after discharge and the length of stay. Those who worked well had on average stayed almost as long in hospital as those who did practically no work at all. The explanation may be that those who worked well often had a long period of rehabilitation and work in hospital; while those who did no work at all had often discharged themselves prematurely against medical advice.
4. The more unfavourable the home, in terms of family relationships and presence of mental disturbance in other members of the family, the longer the stay in hospital.

These findings suggest that (a) unfavourable home circumstances and (b) prolonged unemployment before admission may be predictive of a prolonged stay in hospital. On the other hand, a longish stay in hospital is not necessarily indicative of poor prognosis, since the ability to co-operate in hospital treatment and to establish regular work habits may well lead to a successful re-establishment in the outside world even if home circumstances are unfavourable.

In Part II of the Study the patients' ability to work after discharge was considered in relation to various personal and social factors. It was shown that:

1. In both the schizophrenic and non-schizophrenic groups the majority of patients who worked for more than 75 per cent. of the time they were out of hospital had also had a good work record before their admission.
2. In both groups the majority of patients who appeared to be well at follow-up had a good work record after discharge. While in the non-schizophrenic group a good work record was practically synonymous with recovery, this was not necessarily so in the schizophrenic group.
3. In both groups most patients who maintained a good work record started work within one month of discharge.
4. Schizophrenic patients worked most steadily when they returned to their old jobs, or when their work was arranged while in hospital. This did not apply to the non-schizophrenic patients, who were more often capable of finding jobs for themselves.
5. The work performance of schizophrenic patients who returned to their parents was worse than that of those who went to other kin or into lodgings. This difference was not related to the severity or chronicity of the illness. The work performance of the non-schizophrenic group did not appear to be affected by the type of living group to which they returned.

Disturbed family relationships and mental ill health among relatives were associated with poor work performance in the schizophrenic group. The non-schizophrenic

patients appeared to be less affected by the disturbances in their home environment.

These findings suggest that while both the stability of work habits before the onset of illness and the degree of recovery contribute to the schizophrenic patient's ability to work in the community, social supports after discharge are also of importance. Among these supports are the speed and smoothness of transition from rehabilitation to work, realistic expectations on the part of those with whom the patient lives, and an environment reasonably free from persistent unresolved emotional conflict. This last is thought to be a crucial factor and will be treated in greater detail in a subsequent paper.

Several questions arise from these findings. Could the patients with long periods of unemployment before admission to hospital have been diagnosed and treated earlier? Could more skill and effort be devoted to the employment problems of schizophrenic patients both before and after discharge? Is it possible to modify the unfavourable home circumstances associated with poor functioning in schizophrenic patients? Any consistent attempt at this would involve considerable social work resources. Should more schizophrenic patients be encouraged to live away from their parental homes? This would entail more provision of hostel or lodging accommodation.

Controlled experiments might demonstrate the effectiveness of these social measures in improving the functioning of young schizophrenic patients and in preventing frequent re-admissions to hospital.

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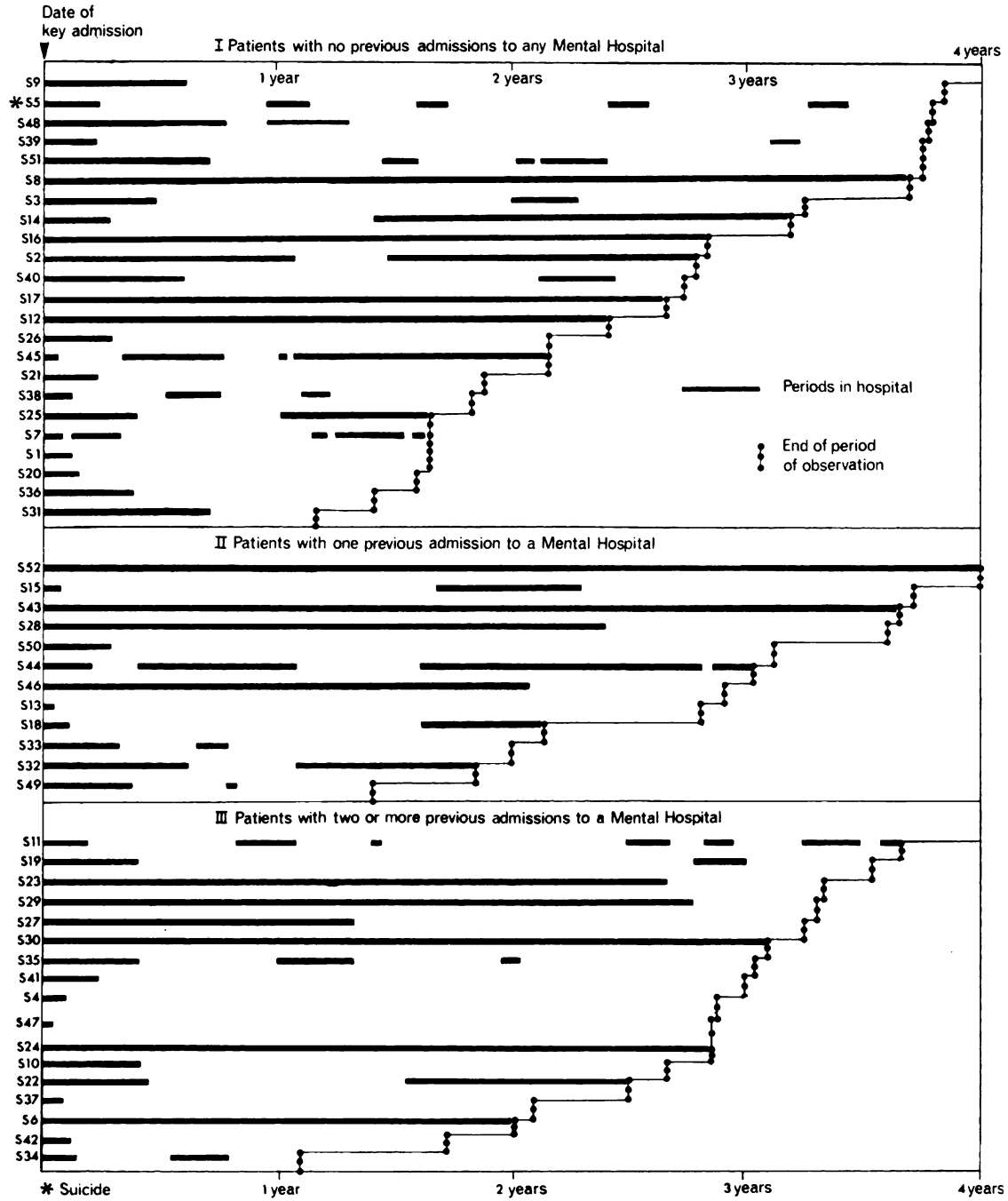
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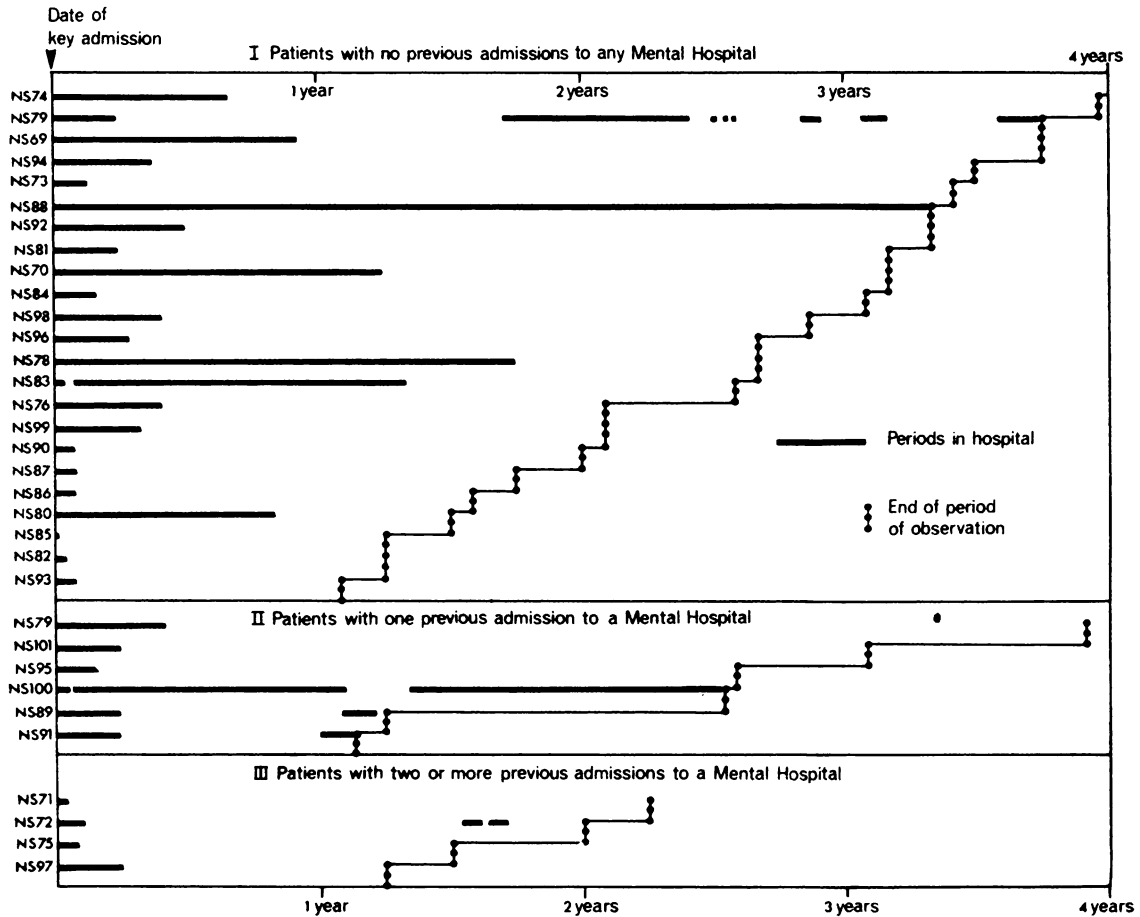
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APPENDIX I

Consecutive Admissions and Re-admissions of 52 Male Schizophrenic Patients Between January 1st, 1958 and December 31st, 1961



Consecutive Admissions and Re-admissions of 33 Male not Schizophrenic Patients
Between January 1st, 1958 and December 31st, 1961



APPENDIX II

Unfavourable Factors in the Patients' Home Circumstances;
Anchoring Examples

- I. Mental Illness and/or Severe Neurotic Disturbance in a Relative with whom a Patient was living.
 1. Father repeated depressive attacks, last admission mental hospital 2 years ago.
 2. Father attempted suicide a few years ago, still sees psychiatrist.
 3. Mother "simple", "very weak". No idea of time. Secretive. Would hide things. Imagined that people were talking about her.
 4. Brother schizophrenic, in and out of mental hospital. Sister mental hospital recently.

II. Evidence of Severe Marital Stress between the Patients' Parents.

1. Always been strife between his parents. "There is no relationship between them." Parents have not slept together for 23 years. Father associates with another woman. Out every night.
2. Outlook very different. Father agnostic. Mother very religious. They do not discuss anything. Always come out on opposite sides. Father intends to leave wife when he retires.
3. Have not slept together for 8 years. Mother said: "I hate the sight of him". Father said that he'd never been in love with her. Constant arguments about religion, delusions, etc.

4. Parents quarrelled in front of investigator, accusing each other of contributing to patient's illness. Father complained that mother nagged him all the time. Mother said that affection was missing in the marriage.
- III. Evidence of Disturbed Mother/Son Relationship. (Strong hostility, ambivalence, as well as marked over-protection).
1. Unpredictable in her moods. Patient said: "She would hit you as soon as look at you". "Forget about my mother." Mother maintained patient talks "filthy". Unsympathetic in her attitude. Little insight into the fact that he was ill.
 2. Patient says "We are completely incompatible". Mother says "If only I knew where I've gone wrong, then I could make amends." Very annoyed if mother says anything. Mother wonders if he was jealous of parents' happiness. Patient appears to have been fighting with his mother for a long time.
 3. Mother asked herself: "Had she been too ambitious for him?" "Had she made too much fuss about his bed wetting?" "Had she idolized him too much?" "I treated him as a captain when he came home on leave".
 4. Very close to patient. "Nothing I wouldn't do for him"—"Catch the world on fire for him." Feels closeness and overprotection has been one of the causes of his illness.
- IV. Evidence of Disturbed Father/Son Relationship. (Strong hostility, ambivalence, as well as marked over-protection).
1. Mother feels father has rejected patient from early childhood. Pushed him out of the way, very strict with him while sister can do no wrong. Endless troubles re cigarette smoking. Father rigid about smoking one cigarette per hour. Patient says "It's my life. You're ruling my life for me."
 2. When father was asked if he was upset about the recent happenings he replied: "Frankly no, we have not been good friends. One could not continue to be interested in him. I do not think he is going to get any better, I think he is going to get worse."
 3. "Never been close pals." Father has feeling that whatever he says or does is wrong. Patient unable to take any instruction from father as a boy. Always said it was wrong. Mother feels father has never given much to patient. "He retreated from trying to guide him."
 4. Father "petted him up", treated him as a baby. Would not let him do things.
- V. Evidence of Disturbed Sibling Relationship. (Strong hostility, excessive rivalry).
1. Older brother rejects patient. Never visits. Takes no interest. Passes him in the street.
 2. Patient feels that his older brother gangs up with mother and has no time for him. "He does not like me there." Attacked elder brother.
 3. Patient has burnt photo of his highly successful brother.
 4. Always very close to sister—like "twins". Patient has now turned as much against her as he has against his mother.