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POST-HOSPITAL ADJUSTMENT OF CHRONIC MENTAL PATIENTS

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UNTIL recently, once a patient had stayed for two years continuously in a mental hospital, his chances of discharge were low (Kramer et al. 1955, Carstairs et al. 1955) and would become progressively lower until, by the eleventh year of stay, they would be about 1 in 100 (Registrar General 1955). This situation may now be changing.

The Royal Commission on the Law Relating to Mental Illness (1957) stated a new viewpoint:

" There is increasing medical emphasis on forms of treatment which can be given without bringing patients into hospital as in-patients or which make it possible to discharge them from hospital sooner than was usual in the past. It is not now generally considered in the best interests of patients who are fit to live in the general community that they should be in large or remote institutions such as the present mental or mental deficiency hospitals . . . No patient should be retained as a hospital in-patient when he has reached the stage at which he could return home if he had a reasonably good home to go to ".

Brill and Patton (1957) and Kramer and Pollack (1958) show that in the United States in 1955–56, the year in which the use of tranquillising drugs became widespread in that country, the number of patients resident in State Mental hospitals declined, in reversal of a long-established trend. Brill and Patton showed that in New York State this could largely be ascribed to an increase in the number of discharges, especially affecting patients who had been more than two years in hospital. Neither Brill and Patton nor Kramer and Pollack (1958) indicated the level at which patients were functioning after their discharge from hospital.

Usually a psychotic patient discharged after a prolonged stay in hospital is not completely recovered but carries at least some residual disability. His remaining in the community will depend partly on the nature and degree of this psychiatric handicap and partly on the social environment to which he returns.

There have been many follow-up studies of former mental patients in general, and of patients with particular diagnoses or who have been exposed to particular forms of treatment (in most of which a stay in hospital of more than two years is claimed to carry a relatively unfavourable prognosis); but we have been able to trace only two studies which dealt specifically with the fate of long-stay patients after discharge from hospital:

Smith (1946) reports the outcome of 56 females who had been in hospital at least four years before discharge from St. Hans Hospital, Denmark. 54 of these still had symptoms; most required considerable help from social agencies. During the follow-up period (ranging from nine months to three years) 6 of these patients were readmitted and 1 committed suicide. Of the 49 who remained in the community only 6 were self-supporting.

Stringham (1952) reported the outcome of 33 patients discharged after an average stay in hospital of twelve years. 15 returned to hospital, but 6 of these were subsequently discharged again. Of the 24 still in the community about two years later only half were self-supporting. Stringham suggested that opposition on the part of the patient's family was the principal obstacle to their remaining in the community, and their ability to obtain gainful employment was the strongest positive factor in those who succeeded.

The present study was designed to ascertain the outcome of long-stay patients discharged from mental hospital and to look for factors in their history and in their subsequent social experiences which were associated with their level of adjustment in the community.

Method of Investigation

Selection of Cases

The population consisted of all those male patients who were discharged by any means from seven mental hospitals in or near London between July, 1949, and June, 1956, and who fulfilled the following criteria:

(1) Subjects of the United Kingdom by birth.

(2) Aged 20–65 on discharge.

(3) Had been in hospital two years or more before discharge.

(4) Not known to have gone to an address outside the Greater London Area.

Patients who died in the first year of discharge were excluded from the sample. There were 3 such deaths during the period, all of them natural. Patients who were out on trial for more than three months consecutively were included as from the end of the three-month period.

Selection of Informants

Whenever possible the primary informant was the housekeeper of the domestic group to which the patient went on leaving hospital—typically his mother, wife, or

sibling, but in some cases his landlady. Any patient living alone was himself interviewed.

Follow-up Interview

An interview schedule was prepared covering 160 items, selected on the assumption that they might have a bearing on the patient's outcome. The schedule was usually completed for each patient after a study of the hospital case-notes and an interview with the primary informant lasting an hour to an hour and a half. Sometimes more than one person was interviewed.

The conduct of the interview was not formalised, but interviewers used a check-list to ensure that all the items had been covered. Each of us took part in interviewing, with weekly meetings for discussion of possible ambiguities in the recording of particular items; in this way it was hoped to ensure uniformity in the recording of data from the interview.

Measures of Outcome

For the purpose of analysis each patient's outcome was assessed in terms of the following criteria:

(1) *Duration of discharge period.*—" Success " (S) was defined arbitrarily as staying out of hospital for at least a year; readmission for more than a month in the year following discharge was counted as " failure " (F). This criterion of success proved to be relevant, especially for schizophrenia. Since information was obtained at intervals of one to six years after discharge, it was possible to calculate that, of the patients who relapsed during the six years, 74% of the schizophrenics and 58% of the non-schizophrenics did so within the first year.

(2) *Level of social adjustment.*—All patients counted as successes were rated by a scale of social adjustment, in which 1 point was given for each of the following three items: (*a*) being gainfully employed for five of the last six months in the first year of discharge; (*b*) being able to look after himself as regards appearance, dress, and use of money; and (*c*) showing adequate interpersonal relationships—i.e., without gross disturbances such as violence, paranoid ideas, or extreme withdrawal.

A score of 3 points rated " full adjustment "; 2 points " partial adjustment "; and 1 or 0 points " poor adjustment ".

Some Characteristics of Population Studied

From the records of the seven hospitals 240 men were identified who fulfilled the necessary criteria, and schedules were completed for 229 (95%). Follow-up information could not be obtained for 11 of the original population, of whom 9 were diagnosed as schizophrenic, 1 as depressive, and 1 as psychopathic. A search of the records of the Board of Control did not reveal evidence that any of these 11 patients had been readmitted to mental hospitals since discharge; all have been omitted from our analysis.

Diagnoses

The diagnoses of the population studied were as follows:

	No. of cases
Schizophrenia	156
Depression	26
Epilepsy	18
Organic psychoses	10
Psychoneuroses	9
Mania	5
Other	5
Total	229

If the population is then divided into two main categories " schizophrenia " and " other " it can be further described in terms of the following factors:

Age.—The mean age of schizophrenics was 39·4 and of those with other diagnoses 45·0; in both the age range was 20–65.

Length of stay.—The two main categories of diagnosis had comparable lengths of stay for the admission to hospital which preceded this discharge, with a mean of 6·5 years (range 2–30 years).

First admissions.—31·4% of schizophrenics and 43·8% of those with other diagnoses were first admissions.

Marital status on admission.—77·6% of the schizophrenics and 42·5% of the others were single on admission.

Patients' Condition on Discharge

Before assessing the patients' outcome one would like to know as accurately as possible their mental state at the time of discharge; but in this retrospective study precise information on this point was unavailable. Some measure of the patients' mental state was, however, provided by the following observations:

(1) *Whether discharged on or against medical advice.*—31% of schizophrenics and 15% of the others were discharged against advice.

(2) *Whether recorded as recovered, relieved, or not improved on discharge.*—Of the schizophrenics 14% were discharged as recovered, 65% as relieved, and 21% as not improved; for the other patients the proportions were 13% recovered, 77% relieved, and 10% not improved.

(3) *A rating of the patients' level of disturbance of behaviour* while living in the community a year after discharge or just before readmission in the case of failures.—This was estimated on the basis of questions about ten specific features of the patient's behaviour and was rated in three categories. Patients who showed only minor peculiarities, or none, were rated " nearly normal ". Patients with evident peculiarities which did not, however, preclude their moving about in society were rated " moderately disturbed " (e.g., a patient with hallucinations and paranoid ideas who found a succession of jobs only to quit them abruptly in response to his delusions). Patients showing more severe disturbances of behaviour, such as could be cited in recommending certification and interfered seriously with his social life, were rated " severely disturbed ". It will

TABLE I—SUCCESSES AND FAILURES

Diagnosis	No. of cases	Successes (%) by level of social adjustment			Failures (relapse in 1st year) (%)
		Full (3 points)	Partial (2 points)	Poor (1 and 0 points)	
Schizophrenia ..	156	25·2	17·4	25·8	31·6
Other	73	28·8	21·9	16·4	32·9
Total	229	26·3	18·9	22·8	32·0

be appreciated that this rating made at a later date can only give a somewhat conjectural (but still useful) indication of the patient's condition on discharge.

Of the schizophrenic patients 39% were rated nearly normal, 35% moderately disturbed, and 26% severely disturbed; of the remainder 45% were rated nearly normal, 36% moderately disturbed, and 19% severely disturbed.

Findings

Measures of Outcome

32% of the total population were failures and 68% successes; percentages were comparable for schizophrenia and other diagnoses.

Table I shows that other diagnoses have a slightly superior but non-significant ($p>0·1$) distribution of social-adjustment scores. 26% of the total population showed a very satisfactory or full social adjustment (93% of these were rated nearly normal in behaviour), whereas 22·8% made a definitely poor adjustment; 18·9% were intermediate between these two social-adjustment categories.

Table II shows the distribution of the three-fold behavioural ratings by schizophrenia and other diagnoses and by success or failure. 40·8% of the total population were rated nearly normal, 35·2% moderately disturbed, and 24·2% severely disturbed. The ratings are related to success or failure.

Relation of Outcome to Clinical State on Discharge

The two indicators obtained from patients' case-notes (" discharged against advice ", and " recovered ", " relieved ", or " not improved " on discharge) were both related to our criteria of outcome. (With the criterion

TABLE II—BEHAVIOUR

Diagnosis	No. of cases	Nearly normal (%)		Moderately disturbed (%)		Severely disturbed (%)	
		Success	Failure	Success	Failure	Success	Failure
Schizophrenia	156	37·8	1·3	23·1	11·5	7·7	18·6
Other ..	73	38·9	5·6	20·8	15·3	6·9	12·5
Total ..	229	38·2	2·6	22·4	12·8	7·5	16·7

of success or failure both showed a coefficient of contingency * of 0·24, $p<0·001$; with the three-fold social-adjustment rating the coefficients were 0·32 and 0·26 respectively, $p<0·01$.)

The rating of patients' level of behaviour was also correlated with outcome, both in terms of success or failure, where C was 0·50 for the schizophrenics and 0·38 for the others ($p<0·001$), and of social adjustment, which was rated in part on observations of patients' behaviour.

It is therefore clear that, in assessing subsequent relationships between clinical and social factors and the patients' outcome, a first precaution must be to ensure that the relationship is not a reflection of the patients' differing levels of clinical state at discharge. In many of the following instances the above indices of clinical state at discharge have been used to counteract crude clinical bias.

Pre-discharge Items

Number of previous admissions.—The relationship of this item to outcome differs for the two diagnostic categories, schizophrenia and other diagnoses. 31% of the schizophrenics were first admissions, and only a few (17%) had been in hospital three or more times before. This small category contained relatively more failures (12 successes and 15 failures, $p<0·01$) but showed no relationship with social-adjustment scores. In contrast, other diagnoses had a greater number of first admissions (44%), of whom only 3 of 32 failed. In this diagnostic group the number of failures increased significantly in the group of patients who had been in hospital before, compared with the first admissions (21 of 41 failed, $p<0·001$). Again no relationship was found with social-adjustment scores.

Length of key admission.—For neither schizophrenia nor other diagnoses did the length of key admission bear any direct relationship to success or failure; nor for other diagnoses did it relate to social-adjustment scores. However, for schizophrenia those with poor adjustment were mainly concentrated in those with less than ten years' stay ($p<0·05$); although trends are not striking, schizophrenics with longer stay in hospital had a slightly superior outcome.

Age at discharge.—Only 2 of the 17 schizophrenics aged more than 55 failed. Otherwise age bore no relationship to success or failure either for schizophrenia or for other diagnoses. As regards social adjustment, however, the younger schizophrenics, aged 20–34, were significantly more often poorly adjusted ($p<0·01$), whereas other diagnoses showed no such relationship.

* Uncorrected coefficients of contingency derived from χ^2 results are used. The maximum for a 2×2 relationship is 0·707 and 3×3 is 0·816.

TABLE III—EMPLOYMENT

Employment	Successes	Failures	Total
6–12 months	89	3	92
1–6 months	19	18	37
Unemployed (includes those working less than a month)	44	52	96
Information inadequate for rating ..	4	..	4
Total	156	73	229

Pre-admission levels of social achievement.—Various measures of pre-admission achievement were obtained in the areas of employment and economic responsibility. Superior achievement was usually significantly related to post-hospital success and to higher social-adjustment scores. The relationships still remained when clinical state at discharge was taken into account.

Post-discharge Experiences and Outcome

The two most important factors in the social experience of a discharged patient were whether the patient worked or not and with whom he lived.

Employment.—Table III shows an important relationship between employment and success or failure. 41% of the population worked for six months or more, and of these 97% succeeded, whereas of the 43% who were never employed only 46% succeeded. Of the 89 successful patients who worked for most of the year a third were rated as either moderately or severely disturbed, and many of the others had residual symptoms, indicating that the presence of psychotic symptoms was not necessarily a serious obstacle to their employment.

Type of living group.—The results so far presented take on new significance when tabulated by type of living group to which the patient returned. The significance of the social setting on discharge has been more fully analysed by one of us (G. W. Brown, unpublished); only the chief points are noted here.

Table IV shows that schizophrenics who returned either to parents, wives, or hostels relapsed in the first year significantly more often than did those returning to other

TABLE IV—WHERE LIVING

Where living	Schizophrenia			Other diagnoses		
	Successes	Failures	Total	Successes	Failures	Total
Hostel	6	7	13	4	7	11
Hostel (supportive)	1	..	1	4	3	7
Parental	55	31	86	8	8	16
Marital	7	7	14	16	1	17
Other kin (mainly siblings) ..	20	4	24	9	3	12
Lodgings	18	..	18	8	2	10
Total	107	49	156	49	24	73

kin (mainly siblings) and lodgings. Those who did succeed while living with their parents had significantly lower social-adjustment scores than patients living with other kin or in lodgings. Fewer living with parents were employed compared with the successful patients living with their wives, with other kin, or in lodgings.

Relatively more patients rated not improved on discharge went to stay with their parents or in hostels; but these differential failure rates and social-adjustment scores still persisted at a significant level when this bias was controlled. This indicates that the type of living group to which a patient goes after leaving hospital may have an important bearing on his subsequent career, whatever his residual disabilities are.

Psychiatrists are familiar with the mother who tolerates, and perhaps even encourages, an attitude of child-like dependence in her schizophrenic son. This kind of relationship was especially common in the 53% of unemployed schizophrenics living with their parents and was very rarely found in other types of living group. Perhaps it is not always beneficial for a schizophrenic to return to the close emotional ties of a parental or marital household.

There was some evidence that behaviour deteriorated more in schizophrenic patients who went to parental and marital groups. For example, the relative incidence of violent outbursts and displays of temper was significantly greater in these groups, whereas other psychotic manifestations (e.g., delusions) were more often reported for patients living with other kin and in lodgings.

Where a schizophrenic lived with his parents and was unemployed, with the result that he was brought into close contact with his mother all day, he was likely to fail; but if he or his mother were away at work for part of each day, he was more likely to succeed.

The relationship of outcome and post-hospital living group was less clearcut in the patients with other diagnoses, but there was some evidence that they, unlike the schizophrenics, tended to do better in situations involving close personal relationships. For example, table v shows completely contrary results for patients of the two diagnostic groups in respect of their marital state at discharge.

TABLE V—MARITAL STATE

Marital state	Schizophrenia		Other diagnoses	
	Successes	Failures	Successes	Failures
Married	7	7	16	1
Widowed, separated, or divorced	16	2	11	14
Total	23	9	27	15

Of the 16 patients with other diagnoses who succeeded in a marital setting 7 were unemployed. In contrast, of the 7 schizophrenics who succeeded in a similar environment 6 were employed. These figures suggest that wives found it easier to tolerate a state of dependence in patients of the former group. A factor which may have contributed to this greater tolerance was the presence of a physical ætiology or physical handicap in 6 out of the 7 unemployed men in this group. These patients were easier to live with and responded more positively to the support offered to them than did the schizophrenic husbands, whose behaviour in several instances was much disturbed.

Aftercare

Only 37 of the 229 patients (16·2%) were reported to have attended an outpatient clinic for follow-up treatment. One or more visits were paid by a psychiatric social worker to 39 patients (17·0%). In neither of these small groups did the outcome differ significantly from that of the remainder.

Social Liabilities Incurred

To reach a just estimate of the outcome of these patients it was necessary to take into account not only their success in avoiding relapse and in attaining a fair level of social adjustment but also the consequences to other persons of the patients' return to living in the community. In some instances the patient's success was bought at the price of occasioning severe distress to others in his household.

A three-fold rating was therefore made of the amount of hardship which the patient's presence imposed on other members of his living group. The rating " severe liability " was reserved for those cases in which the patient's deranged behaviour caused considerable hardship to others—e.g., through violence (which was displayed by 63% of patients in this category), sexual deviation, callousness, paranoid accusations, and threats of suicide.

Where the patient's behaviour caused less serious hardship, the rating " moderate liability " was given; and patients whose symptoms, if noticeable at all, caused no obvious distress to others were rated " minimal liability ". This estimate was influenced by the attitude of the other members of the household, some of whom found even slight psychotic symptoms very disconcerting, whereas others (especially certain mothers) showed extreme indulgence.

17% of the total sample were rated severe liability, 28% moderate liability, and 55% minimal or no liability. Many of the patients who caused distress to others (79% of those rated severe and 44% of those rated moderate liability) relapsed within the year.

The category severe liability included 16 patients who were discharged against medical advice, either after an escape or at their relations' behest, but proved too difficult to cope with in the home, as in the following example:

Case 1.—Discharged after his third admission for schizophrenia, which he had had for eleven years. Still profoundly disturbed: liable to attack his mother and step-father in sudden outbursts. These attacks were tolerated, but when he began to make sexual demands on his sister he was returned to hospital.

Among the 156 successes there were 36 patients (23%) who caused moderate hardship to others and 8 whose presence in the household caused severe hardship. In the latter group it was evident that the burden of a very disturbed patient had only been transferred from the hospital to the home. 4 of these patients lived with their parents, 3 with their wives, and 1 with a foster-sister.

At the other extreme, patients rated as minimal liability tended to have a favourable outcome, except for 24 men who went to live in Rowton Houses, Salvation Army hostels, or other institutions. 11 of these returned to hospital, for the most part of their own choice. These probably form part of the group of long-stay patients referred to in the Royal Commission report as " having reached the stage at which they could return home if they had a reasonably good home to go to ".

It is in the intermediate category of patients presenting moderate liability that attitudes of persons in their immediate environment might especially be expected to influence the outcome. A typical example was the following:

Case 2.—Schizophrenic, aged 26, taken home against advice. Remained at home nearly two years although not well enough to work; often hallucinated, afraid to be left alone, and conspicuously strange in manner: " You could not take him out to meet people ". Parents lived in a genteel suburb and were embarrassed by son's appearance; their social activities were much restricted while he was at home.

Discussion

Previous follow-up studies have emphasised the diminishing chances of recovery of patients whose stay in mental hospital is prolonged; Smith (1946) and Stringham (1952) reported a poor outcome for the discharged chronic psychotic. In contrast, the present study showed that 2 of 3 long-stay patients succeeded in remaining in the community for at least a year after discharge; and that 2 of 3 of these successes were maintaining a viable social adjustment. In contrast to the usual findings with early cases, the outcome bore little relation to the patients' ages, recorded diagnoses, or length of stay in hospital; it did, however, bear a significant relationship to the

social group to which they returned and to their employment record.

It is no new discovery that it is sometimes inadvisable for schizophrenic patients to return to their own families; the point has been made in many of the standard textbooks of psychiatry, and it provides one of the arguments in favour of foster-homes. The present study, however, makes it possible to support the assertion with a substantial series of instances. Freeman and Simmons (1958), discussing the outcome of male psychotics discharged after a short stay in hospital, contrast the outcome of those who returned to conjugal and to parental settings and conclude that wives have higher expectations of performance in relation to the recovered patient than do parents. Patients are just as likely to fail in the conjugal setting, but if they survive they do so at a higher level of social functioning.

The importance of employment as a preventive of relapse is emphasised by Cohen (1955), who showed that, when chronic schizophrenics left a Veterans' Hospital, their success in avoiding relapse was not related to the continuance of minor symptoms but was significantly related to their success in finding work; and that this, in turn, was related to the amount of vocational planning before the patients left hospital. The present study suggests that employment is not only beneficial for the patient but also makes it easier for the household to tolerate a mentally handicapped member. In this connection it may be noted that many of the patients who were unemployed were judged by the investigators to be capable of working. If they could have been offered sheltered employment pending their return to normal work, their chances of survival in the community would have increased.

To help in finding jobs and suitable accommodation is a principal function of the psychiatric social worker. It is no adverse criticism of them but rather a reflection of the volume of work which they have to undertake, that so few of these patients were able to profit from their services. Nor were the patients the only ones who needed social-work help. The assessment of " distress caused to others " revealed that in many cases the patient's household needed help in dealing with problems presented by his return. " Community care " will not represent an advance in treatment if it means that a burden has merely been transferred from the hospital to the family. As was shown some years ago for shock treatment (Feldman et al. 1947), it may be necessary to intensify the provision for aftercare so as to derive the full benefit of the new emphasis on extra-hospital treatment of the mentally disabled.

Summary

A follow-up inquiry was completed with 229 of 240 patients discharged after more than two years' stay in a mental hospital.

68% of these patients succeeded in remaining out of hospital for at least a year, and 66% of these were rated as showing either full or partial social adjustment.

Successful outcome was associated with patients' clinical state on discharge, with their subsequent employment, and with the social group to which they went: patients staying with siblings or in lodgings did better than those staying with parents, with wives, or in large hostels.

In this group of patients the outcome bore little relation to patients' age, recorded diagnosis, or length of stay in hospital.

The social liability presented by these patients to their households was estimated.

The need for supportive social work with ex-patients and their families is pointed out.

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CHRONIC MENTAL ILLNESS

A Study of Clinical and Social Factors Related to the Outcome of Patients Discharged from Mental Hospitals

A THESIS

Submitted for the degree of M.D. of Edinburgh University

by

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CONTENTS

CHAPTER I

AIM AND RELEVANCE OF THE INVESTIGATION

1. Aim of Study

This inquiry was designed to ascertain the clinical and social outcome in men who, in the last seven years, returned to live in the community after a prolonged stay in mental hospital; and to find out whether their success or failure after discharge from hospital could be related to particular factors in the patients' clinical histories or in their social environments.

2. Relevance of this Type of Inquiry

In recent years, the functions of the mental hospitals have been subjected to a re-evaluation. The Report of the Royal Commission on the Law Relating to Mental Illness and Mental Deficiency (H.M.S.O., 1957) stated clearly what, in the view of its members, should be the guiding principles of future mental hospital practice: "There is increasing medical emphasis on forms of treatment which can be given without bringing patients into hospital as in-patients or which make it possible to discharge them from hospital sooner than was usual in the past. It is not now generally considered in the best interests of patients who are fit to live in the general community that they

should be in large or remote institutions such as the present mental or mental dificiency hospitals..... No patient should be retained as a hospital in-patient when he has reached the stage at which he could return home if he had a reasonably good home to go to. At that stage the provision of residential care becomes the responsibility of the local authority".

There are numerous precedents for this point of view in psychiatry. Discharge from hospital of the stabilised mental patient was advocated by Pinel (1801) and by Connolly (1830) and in more recent times by E. Bleuler (1905), by his successor H.W. Maier (1928), and by H. Simon (1927, 1929). It has been the underlying principle of family care as exemplified in Gheel, in the Scandinavian countries (Wing, 1957), and in America (Crutcher, 1944). Its ready and widespread acceptance in this country at this time reflects the striking change which has taken place in the work of the mental hospitals since the nineteen-thirties. As Shepherd (1957) has shown, changes in the numbers of annual admissions and discharges and in patients' mean duration of stay are attributable not only to the introduction of new methods of treatment but also to a change in social attitudes towards psychiatric treatment in general (to which both medicine and legislation such as the 1930 Mental Treatment Act have contributed) as a result of which patients with milder and

earlier forms of illness are more readily availing themselves of treatment.

Until very recently, the conditions which responded most readily to programmes of active treatment have been those with a relatively short history. Numerous follow-up studies (e.g. Adler, 1955; Blair, 1940; Chase and Silverman, 1943; Mettler, Crandell, Wittenborn, Litten, Feiring and Carpenter, 1954; Harris and Norris 1955; Harris, Linker, Norris and Shepherd, 1956; Hunt, Feldman and Fiero, 1938; Jackson and Jaco, 1951; Pascal, Swenson, Cole, Feldman and Bayard, 1953; Stalker, 1939; Rupp and Fletcher, 1940; Taylor and Von Salzen, 1938) stressed that the duration of a patient's illness, or of his stay in hospital, was inversely related to his chances of recovery. This led to a concentration of therapeutic effort and interest in the admission block of the mental hospital, to the relative neglect of the long-stay patients who still constitute over 80 per cent of the total resident population - a situation which several psychiatrists have noticed and deplored (none more trenchantly than Bickford (1955, 1958)). The degree to which long-stay patients have been "left out" of improvements in psychiatric therapy was shown clearly by a monograph from the U.S. National Institute of Mental Health (Kramer, Goldstein, Israel and Johnson, 1954) which contrasted admission and discharge rates of patients of a State Hospital in 1946-50 with similar

rates in the three preceding ten-year periods. These authors showed that the probability of discharge from hospital during the first year following admission for patients with functional psychoses was considerably higher in 1946-50 than in any of the earlier periods; but they also showed that patients who had remained in hospital for two or more years continuously had an equally low probability of discharge in all four periods under review.

Since this paper was published, however, a new factor has entered the scene. In 1955-56 for the first time (with one exception, during the recent war) in many years the number of patients resident in mental hospitals in the U.S.A. showed a slight fall, instead of the usual increase; and this trend was repeated in 1956-57. Figures of admissions and discharges of patients in mental hospitals in New York State have been published (H. Brill, and R.E. Patton, 1957). During 1955-56 18.8 per cent more patients were discharged from New York State mental hospitals than in the previous year. This increase in discharge rates was slightly higher for schizophrenic patients (22.4 per cent increase) and for patients who had been in hospital for from 2 - 20 years (36.7 per cent increase). Brill and Patton suggest that there are good grounds for attributing this change to the use of chlorpromazine - a suggestion which has immediately been challenged. In the discussion following the

presentation of their paper it was pointed out (Eisen, S.B. 1957) that besides tranquilising drugs other factors - such as variations in socio-economic conditions in the community, or changes in hospital staffs' attitudes towards therapy for chronic patients - may have contributed to these results.

In a comprehensive review of mental hospital statistics throughout the U.S.A., a group of workers from the National Institute of Mental Health has confirmed the nett decline in occupancy of mental hospital beds in the U.S.A. in 1955-56 (Kramer, M. and Pollack, E.S., 1958). These authors point out, however, that deaths as well as discharges have risen in this period, and emphasise the multiplicity of factors which have to be taken into account in evaluating the significance of a change in the number of resident patients.

Although too little time has elapsed since the widespread introduction of the tranquillising drugs to permit a full appraisal of their contribution to the treatment of chronic psychoses, there are already many psychiatrists who share the opinion of Brill and Patton that they have materially improved the prognosis of long-stay patients, and especially of chronic schizophrenics. This lends additional impetus to the movement for developing community care for chronic psychotic patients. If such treatment in the community is to be efficiently carried out, however, it must be based upon an informed appraisal of the

prognosis of chronic mental illness, and of the part which social and clinical factors play in the outcome of these conditions.

CHAPTER 2

REVIEW OF LITERATURE ON THE OUTCOME OF MENTAL HOSPITAL PATIENTS

In order to evaluate adequately the outcome of the patients included in the present study, it is necessary to bear in mind the prognosis of the total population of mental hospital patients of which they form a particular sub-group. In the following review, a number of relevant follow-up studies are considered under the following headings:

a) Outcome of total admissions to mental hospitals
b) Prognosis in schizophrenia
c) Prognosis in affective psychosis
d) Papers reporting interesting isolated cases of delayed recovery
e) Studies of factors influencing the outcome of patients after leaving mental hospital

a) Outcome of Total Admissions to Mental Hospitals

R.G. Fuller (1930) reported a study of the expectation of hospital life and outcome for mental hospital patients on first admission. In his survey he found that 58.6 per cent of manic-depressives but only 26.8 per cent of schizophrenics were discharged after one year. There has been general agreement in studies of this kind that the longer a patient stays in hospital, the less is his likelihood of discharge in any subsequent year. As a result of a review of 9,821 first admissions to Ontario mental hospitals, L.S. Penrose was able to

construct a chart showing patients' percentage chances of remaining in hospital on the basis of their sex and age on first admission, and length of stay, (Penrose and Marr, 1943).

W.L. and W.M. Holt (1952) published an analysis of the outcome, thirty years later, of all of the 141 patients admitted to Westborough State Hospital in 1921. They succeeded in tracing all but ten of these patients, and of those traced they found that 26 per cent had recovered before death or at the time of the follow-up. 42 per cent of the cohort were originally diagnosed as schizophrenic and 39 per cent of the patients surviving in the community also were so diagnosed. Patients whose schizophrenic diagnosis was never called into question had a less favourable outcome (only 13 per cent recovered). If the last hospital diagnosis was accepted as valid, dementia praecox patients recovered ultimately in 23 per cent of cases and were much improved in a further 6 per cent.

Leta M. Adler (1952) reported the outcome of 1054 patients admitted to mental hospital from two rural counties in Arkansas during the decade 1938-48. Like other investigators, she was impressed by the adverse prognosis associated with a prolonged stay in hospital: "It is clear that (after the first weeks) the longer a patient remained in the State Hospital, the greater was the probability of his dying there". At the time of her follow-up, of the original cohort 47.5 per cent had died (34.3 per cent

in hospital and 13.19 per cent out of hospital), 14.8 per cent were still in mental hospital, 34.3 per cent were living in the community and 6.7 per cent were untraced.

The factor of prolonged hospital stay was statistically elaborated by research workers collaborating in the Columbia-Greystones Lobotomy study (Crandell, Zubin, Mettler and Logan, 1954). They found that a patient's "immobility index" (number of days in hospital during the two years following first admission divided by number of moves into hospital) bore a very significant negative relationship to his eventual outcome.

In a methodologically instructive paper Pascal and his colleagues (1953) described their analysis of 21 variables extracted from patients' case-notes which would, they hoped, have significance in predicting whether the patient would be rated as improved or unimproved one year after discharge from hospital. Eleven of these variables had significantly high correlations with outcome ($p < .01$) namely (1) being married, (2) display of affect, (3) oriented in time and place, (4) direction of aggression: outward-turned aggression carrying the better prognosis, (5) diagnosis (schizophrenia less favourable than affective states), (6) acute onset, (7) duration of illness, (8) duration of hospital stay, (9) clinical evaluation on discharge, (10) strong precipitating stress, (11) amount of treatment received (an admittedly crude global measure). An

important qualification of this study, however, is that the 486 patients were all between the ages of 15-55 and were leaving hospital after their first attack of a functional psychosis.

Harris and Norris (1955) used discharge rates (expressing numbers discharged by a given period as a fraction of the original population) in order to show variations of prognosis with age, diagnosis and length of hospital stay in 297 patients admitted to hospital with functional psychoses. The majority of patients who were going to leave hospital did so in the first year following their admission: 41.4 per cent had left hospital within two years. Of the remainder, only 27 out of 174 patients (15.5 per cent) left in the course of the next 17 years.

In recent years a number of publications based upon mental hospital records in Norway (Dedichen, 1946 and Ødegard, 1954) and in New York State (Malzberg, 1952, 1953) have shown that since active programmes of shock therapy became generally adopted, the mean duration of stay of all patients admitted to these mental hospitals has significantly decreased and the proportion of patients discharged "recovered" has increased. In the instances cited above, the type of patient admitted to hospital was believed to have remained the same. This is almost certainly not the case with admissions to British mental hospitals, where the numbers of patients admitted has been rising steadily and their mean duration falling for several years.

Shepherd (1957) demonstrated that these changes can be attributed in large part to the admission of a higher proportion of patients with early, mild and recoverable conditions (particularly neurotic and depressive reactions) and not exclusively to the more active use of physical treatments.

b) Prognosis in Schizophrenia

Studies which purport to show the outcome of schizophrenia have given widely differing results, due in part to differences in the criteria of outcome: for example, Mayer-Gross (1932) reported "social recovery" in 35 per cent of 294 patients followed up for 16 - 17 years, whereas Evensen (1937) regarded only one out of a series of 815 patients as "cured". Another source of variation has been due to the inclusion of acute or periodic cases (such as are commonly seen at University clinics) in some series, whereas others consist chiefly of the chronic schizophrenics who tend to accumulate in large mental hospitals.

The majority of follow-up studies of schizophrenia have been focussed upon clinical factors which might differentiate between cases which had relatively good or bad prognosis. A classic monograph by Langfeldt (1935) distinguished between process schizophrenia (characterised by marked persecutory delusions, ideas of influence, depersonalisation and sometimes catatonic stupor) and atypical schizophreniform conditions

(showing manic-depressive features, clouding of consciousness, incoherence, fluctuating symptoms). The former category was shown to have the worse prognosis and to be, in Langfeldt's view, the product of inherited predisposition.

Horwitz and Kleiman (1936) who obtained follow-up information on 170 out of 193 schizophrenic patients after intervals ranging from nine months to four years following their discharge from the New York State Psychiatric Institute found that 124 (73 per cent) of those whom they traced had required to be re-admitted to hospital. Sixty-one patients were rated as improved, nine patients as recovered. In contrast to Langfeldt, these authors regarded contemporary claims concerning prognosis in schizophrenia to be unfounded: "In the majority of cases, recoveries seemed unexplained..... Unimproved cases, when compared with recovered cases, showed such a distribution of the accepted criteria for prognosis (sudden onset - previous personality - confusion - degree of affective disturbance) as to question their value in forecasting the future course". Only 13 patients in their series had been in hospital for more than a year. Of these, nine were found to have been re-admitted to hospital and four were still out.

A follow-up by Romano and Ebaugh (1938) of 600 schizophrenic patients showed the outcome (after an interval which varied from one to five years) to be as follows: Complete remission - less

than one per cent; Marked improvement seven per cent; Improvement 16 per cent; No improvement 56 per cent; Deterioration 21 per cent. This study had the disadvantage that only 57 per cent of the original sample were successfully traced; nevertheless its rate of 23 per cent for "recovered or improved" is not unlike that of other contemporary studies. Thus, Wooton, Armstrong and Lilly (1935) reported a recovery rate of just under 20 per cent. Dussik (1937) found 20 per cent spontaneous recoveries; Braatoy (1936) followed up a series of cases from 5 - 7 years after admission and found 20 per cent recovered and 10 per cent improved.

Cheyney and Drewry (1938) studied the outcome in 500 cases of dementia praecox admitted to mental hospital and came to the conclusion: "We may expect that from two to 12 years after admission, of these 500 patients 10 per cent will have died, 43 per cent will be in mental hospital and 47 per cent will be living in the community..... Approximately 60 per cent of the original group will be unimproved, 16 per cent improved, 14 per cent much improved and 12 per cent recovered completely".

Stalker (1939) reviewed 3,551 cases of schizophrenia reported in the literature and found relatively complete recovery in 12 per cent; improvement in 19 per cent and failure to improve in 69 per cent. In his own series of 129 cases treated at the Royal Edinburgh Hospital for Nervous and Mental

Disorders, 31 per cent showed some degree of remission.

Malamud and Render (1939) reviewed 309 schizophrenic patients admitted over a period of eight years, and came to the conclusion that a follow-up of at least five years was essential in order to obtain reliable results. The findings for their series were: completely recovered - 14 per cent; social recovery - 8 per cent; improved - 10 per cent; unimproved - 58 per cent; dead - 10 per cent. Like their predecessors, they also tried to identify favourable and unfavourable clinical features, but were obliged to report: "It is somewhat discouraging to find that the psychiatric symptomatology as tabulated in our results affords very few if any points of importance in prognosis". Among the favourable factors which they identified were: onset in second or in fourth decade; cyclothymic personality; I.Q. over 105; positive heredity for schizophrenia; acute onset; previous attacks of a different type. In this series the customary diagnostic subdivisions - into simple, catatonic, hebephrenic or paranoid types - showed no relationship to outcome.

Rennie (1939) reported a long-term follow-up of 500 schizophrenic patients, of whom 222 were followed for an average of 20 years. On discharge from the Phipps Clinic, 43 per cent were in remission, 57 per cent unimproved; after 20 years, 27 per cent were rated as recovered, and a further 13 per cent, though not recovered, were still out of hospital.

Blair (1940) in a review of the literature found spontaneous remissions reported in about 40 per cent of schizophrenic first admissions, and showed that after a second attack remissions occurred in 50 per cent of cases, but that following subsequent attacks remissions were rare. His own follow-up of 120 consecutive schizophrenic men patients under the age of 45 showed only eight to be much improved and eleven improved. A second study, of 120 consecutive cases treated with cardiazol led him to give a guarded endorsement to this treatment provided the illness were of less than three years' duration.

Rupp and Fletcher (1940) reported a five to ten year follow-up study of 641 schizophrenic first admissions. Their status at the time of the inquiry was: In the community - 27.5 per cent; in mental hospital - 53.5 per cent; dead - 14 per cent; untraced - 5 per cent. The age of onset was not significantly related to outcome, but both the duration of symptoms and the duration of hospital stay were so related: 75 per cent of patients whose stay in hospital was less than six months, but only 7 per cent of patients with over two years' stay showed improvement. Patients' chances of discharge from hospital declined with each year of stay: especially sharp falls in the level of expectation of discharge were shown after six months, one year and two years in hospital.

Manfred Bleuler (1941) studied a series of 500 schizophrenic patients in mental hospitals in Switzerland and the U.S.A. After an interval of 15 years, approximately one quarter of these patients were found to have recovered; one quarter showed mild residual defect; one quarter marked personality deterioration and one quarter became demented or died. Recovery was associated with acuteness of onset, deterioration with insidious onset.

Chase and Silverman (1941) made a critical survey of the literature on prognostic criteria in schizophrenia. They found considerable disagreement on some points, but general agreement that the following were favourable features: short duration of illness, extraverted pre-psychotic personality, acute onset, presence of external precipitating factors, and of symptoms of affective disturbance. The same authors later carried out an analysis of prognostic factors in 150 schizophrenics whom they treated with shock therapy (Chase and Silverman, 1943). In this series, the most favourable factors were: acute onset, short duration, absence of process symptoms, presence of manic-depressive symptoms and history of previous episodes of mental illness. Patients whose illness lasted over two years had a significantly worse prognosis.

Appel, Myers and Scheflen (1953) performed a valuable service by collating the literature on prognosis in psychiatry, and

combining the figures derived from studies which met their criteria for strictness of methodology. In this way they were able to show that out of 52,635 schizophrenic patients who received none of the "specific" treatments, the immediate outcome was favourable in 29 $\pm$ 10 per cent. The five-year prognosis, in terms of "recovered" or "much improved" was little different, at 27 per cent.

In a recent study Holmboe and Astrup (1957) reported the outcome of 255 schizophrenic patients admitted for the first time to Gaustad Hospital, Oslo between 1938 and 1950. When followed-up after an interval of six to eighteen years, the outcome of these patients was found to be as follows: Recovered - 38 per cent; improved - 20 per cent; moderate deterioration - 20 per cent; severe deterioration - 22 per cent. Factors associated with relatively favourable outcome were: older age of onset; marriage; acute precipitating stress; presence of confusion, excitement or depression but absence of Langfeldt's "typical" schizophrenic symptoms. Unfavourable factors were: schizoid prepsychotic personality; absence of precipitating stress; "social misery and loneliness"; and presence of many typical schizophrenic symptoms.

The introduction of empirical methods of physical treatment for schizophrenia (insulin coma, metrazol and electro-shock, leucotomy, tranquillizing drugs) has given rise to several

thousands of papers purporting to show the effectiveness and limitations of these treatments. Unfortunately, the great majority of these reports reveal not only their authors' commendable therapeutic enthusiasm but also an almost total ignorance of the principles of research methodology.

This was not, of course, invariably the case. For example, Kennedy (1940) in an early review of the effects of convulsion therapy was able to state: "There can be no doubt that the introduction of pharmacological shock-therapy has been the most stimulating event in the therapy of mental disorders since the discovery of the malarial treatment of general paralysis"; but he went on to point out that some of the initial expectations for this treatment were over-sanguine: "The recovery rates in some series are lower than the spontaneous remission rate in some prognostically favourable groups of schizophrenics". From this he drew the conclusion that convulsion therapy would be most effective in particular sub-categories of schizophrenia; and he went on to predict its probable usefulness in other forms of mental disorder such as manic-depressive psychosis.

Joseph Zubin (1953), who undertook a comprehensive review of this literature while engaged in the Columbia-Greystones project for the evaluation of leucotomy, stated very clearly the shortcomings of most reports of new therapies: "The basic elements in the design for the evaluation of therapy are (1) a

homogeneously selected group of patients; (2) a comparable control group; (3) a sufficiently long follow-up period; and (4) specific objective criteria for evaluating the outcome. A review of the literature indicates that only a small number of studies satisfy these criteria. The results of these studies indicate that specific therapies as contrasted with non-specific therapies yield better immediate outcome, but in the long run, no better eventual outcome. Such a result can be explained either by assuming that the present-day therapies do not alter the basic course of the disease but only hasten the improvement of patients who would have eventually improved anyhow, or that sufficient knowledge is not available for selecting the most suitable therapy for each patient." Five years later a British psychologist published a very similar warning (Foulds, 1958). He pointed out that statistically valid research design was still absent in the majority of reports of psychiatric treatment. In the minority of papers where adequate controls and tests of significance were used, claims for the success of the treatment were much less frequent.

These criticisms have to be borne in mind when reviewing the claims that specific methods of treatment have altered the course of schizophrenia, or of other psychoses. Summaries of such claims can be found in Kalinowski and Hoch (1952), in Sargant and Slater (1954), and in the review by Appel et al (1953).

In reports of insulin coma therapy which relate to a diversity of forms of insulin treatment and to a diversity of sub-groups of schizophrenia, very widely differing rates of success have been claimed - from four per cent to 88 per cent remissions in different groups of patients. It is noticeable that the best results (70-88 per cent remissions) have been claimed in cases of acute and recent onset, whose prognosis is best even in the absence of specific treatment. It should also be pointed out that the first strictly controlled test of insulin treatment (Ackner, Harris and Oldham, 1957) showed no specific effect which could be attributed to the drug. These considerations have led some critics, notably Bourne (1953, 1958) to conclude that insulin coma treatment has had no specific effect at all, and that such favourable results as have been claimed can be attributed to the personal attention which this therapy brings to bear upon the patient. The protagonists of insulin treatment, on the other hand, claim that it accelerates remission and that even though subsequent relapse will often occur, it enables the schizophrenic to spend less total time in hospital than would otherwise be the case.

Differences in the types of patient treated, and in the amounts of treatment, may be responsible for the very wide range of results claimed for metrazol and electric shock therapy. There is some agreement, however, that when the duration of the

illness has been less than six months, remission will be obtained in 80 per cent of cases; where it has been present for up to 18 months, remission rates fall to between 30 and 60 per cent, and in chronic schizophrenia remission rates fall to less than 10 per cent (Kalinowski and Hoch, 1952, pp. 185-192). In the review by Appel et al (1953) electric shock therapy gave a significantly lower rate of recovery (32 $\pm$ 12 per cent) than did insulin coma (44 $\pm$ 11 per cent) but this study did not allow for the duration of illness of patients offered these respective treatments. There are, however, few reports of the extent to which these remissions are sustained after discharge from hospital, although Kalinowski claims that, like insulin treatment, shock therapy can enable a schizophrenic to spend less time in hospital and more at home during the years following the onset of his illness.

Prefrontal leucotomy was the first of the new methods of treatment to offer hopes of social recovery to the chronic as well as to the acute schizophrenic patient. A just evaluation of this treatment has been more than usually bedevilled by the emotional involvement of both its protagonists and its detractors. Strong claims on its behalf have been made by Freeman and Watts (1950), Partridge (1950) and Pippard (1955). Unlike the treatments mentioned above, the most favourable results are claimed not in the early cases with good general prognosis (who

are unlikely to be subjected to so drastic a treatment) but in longstanding cases of catatonic excitement and of paranoid schizophrenia in which deterioration of the personality has not occurred. Curran and Partridge (1955) explicitly stressed the importance of an active programme of re-socialization for the patient following his operation in order to ensure that he benefits from it to the fullest extent; most authors would endorse this, but Kalinowski (1958, p. 561) in a recent paper surprisingly expressed the contrary opinion: "Active rehabilitation of schizophrenics is not an indispensable requirement". Kalinowski and Hoch (1952, p. 260) summarise the results of the major published studies in the following, rather vague terms: "Over-all figures of one-third markedly improved, one-third slightly improved and one-third more or less unchanged can be obtained in schizophrenics who - and this should be repeated once more - had failed under all other types of treatments".

The tranquillizing drugs (notably chlorpromazine and the rauwolfia derivatives) which have come into widespread use in psychiatry only since 1955 have also shown good results with chronic schizophrenic patients, as has been unequivocally demonstrated by Brill and Patton (1958); but here again, caution is needed before accepting some of the premature claims which have been made on their behalf. Paul Hoch (1958, p. 568) has expressed the view that with these drugs from 10 to 15 per cent

of chronic schizophrenics improve to such a degree that they are able to return to the community.

c) Prognosis in Affective Psychosis

Affective psychosis in general carries a much better prognosis than does schizophrenia. In studies of large series of these patients, recovery from a first attack was found in 93 per cent of patients by Rennie (1942); in 92 per cent of first admissions with mania and in 80 per cent with depression, by Lundquist (1945). Karagulla (1950) found that over 80 per cent of 923 depressive psychotics were discharged as recovered or improved following the attack under survey.

Relapses are not uncommon, so that a truer evaluation of outcome is given by noting the total time spent in hospital during a given period following the patients' first admission. This was done by Harris and Lubin (1952) who showed that 135 patients with affective psychosis had spent an average of 59 months in hospital during the 20-year review period whereas 289 schizophrenic patients had spent an average of 145 months in hospital.

Relatively few patients with affective psychosis become chronic. In a follow-up of 171 manic-depressive and 47 involutional depressive patients, Bond and Braceland (1937) found that five years after admission 30 of the former group and 10 of the latter

(that is, 18 per cent of the combined total), were unimproved. Unfortunately, the authors did not distinguish between those who remained in hospital continuously and those who relapsed before the time of the follow-up inquiry.

Lundquist (1945) followed up 319 manic-depressive first admissions for periods up to 30 years. He found that only eight manic and 44 depressive patients suffered from chronic, unremitting illness. Of the former, two committed suicide, two died unrelieved and the remaining four were later diagnosed as schizophrenic; of the chronic depressives, one developed alternating manic and depressive insanity and nine became manifestly schizophrenic. The remaining chronic cases showed some mental impairment but to a much less degree than occurs in chronic schizophrenia.

It is naturally of practical interest to try to predict which patients will become chronic. Steen (1933) followed up 493 manic-depressive patients, examining their clinical features to see which correlated with their outcome. He concluded that recovery was most likely if the premorbid personality was normal, if there was no history of hereditary influence and if the onset was acute. In contrast, Lewis (1936) did not believe that there were any unequivocal prognostic signs. He wrote: "Manic-depressive psychosis is a provisional group of heterogeneous disorders. It is not surprising or disconcerting if we have to

confess that we cannot find a clear and easy answer to our questions about the future in such an illness".

The prognosis of affective psychosis has been very significantly altered by the introduction of shock therapy. This treatment does not prevent recurrence of the disorder, but it does appreciably shorten the duration of the attack. Thus Cerletti (cited in Kalinowski and Hoch, 1952, p. 180) claimed that the average duration of hospital stay of manic-depressives in Italian institutions fell from 180 days to 31 days after the introduction of E.C.T. Oltman and Friedman (1950) reported that patients with a first admission for depression were discharged within two months in 75 per cent of cases if they had E.C.T. but in only 17 per cent of cases if they did not. Huston and Locher (1948) compared matched groups of manic-depressive patients who were either given or not given E.C.T. At the end of the follow-up period, recovery took place in 88 per cent of the treated, and 79 per cent of the untreated patients; but for the former the mean duration of treatment was nine months, for the latter, 15 months. It should be added that not all reports have been so favourable. Karagulla (1950) found that E.C.T. neither significantly increased the rate of recovery nor significantly shortened the duration of stay in hospital of the depressive psychotics whose cases she reviewed.* Appel et al (1953) contrasted the remission rate of 58 $\pm$ 20 per cent in 1,934

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* It was pointed out, however, that her negative findings were due to faulty analysis of her data which in fact supported quite different conclusions (Slater, 1951).

patients reported to have been given non-specific hospital care with that of 71 ± 10 per cent in 6,551 patients who had E.C.T. This difference was well short of the 0.01 level of significance and was described by the authors as only "suggestively significant".

That recovery may occur after a considerable interval was shown by a seven-year follow-up inquiry carried out by Hohman (1937). Twenty-six out of his 122 respondents reported recovery after illnesses lasting for more than two years.

Leucotomy has been performed relatively infrequently in the affective psychoses, and then only on patients who failed to respond to E.C.T. In these chronic cases, the series reported by the Board of Control (1947) showed recovery in 45 per cent, with another eight per cent sufficiently relieved to be able to leave hospital. Freeman and Watts (1950) claim 33 per cent much improved.

The tranquillizing drugs have not so far proved efficacious in treating affective psychoses, although they do give temporary symptomatic relief in states of manic excitement and of agitated depression, and have been employed as adjuvants to E.C.T. (Delay, Deniker and Ropert, 1956).

d) Papers Reporting Interesting Isolated Cases of Delayed Recovery

A recurrent theme in all of the above reports has been the progressive decline in a patient's chances of being discharged

from hospital if his stay becomes prolonged beyond one year. This has been expressed statistically by Danziger (1946) who analysed data from American State Hospital returns, up to 1933. He calculated that at the time of admission a schizophrenic patient's chances of being discharged "recovered" were 5.5 per cent; of being discharged "improved" 32 per cent; similar prospects for a manic-depressive patient on admission were 37 per cent and 25 per cent. After two years' stay, a schizophrenic patient had only one chance in a hundred of being discharged "recovered" and a seven per cent chance of being discharged "improved"; manic-depressive patients with an equal length of stay had a 4.6 per cent chance of recovery and a 3.5 per cent chance of being discharged "improved".

With more prolonged stay in hospital, the chances of the patient's ever being discharged become progressively smaller; thus, if he has been in hospital for ten years, his likelihood of being discharged is about one chance in a hundred. (Registrar General's Statistical Review, 1953).

It should be pointed out, however, that at least one study (Swensen and Pascall, 1954) has led to the rather different conclusion that "the mere passage of time presaged neither good nor bad for mental illness, but rather that it was the processes allowed to progress unchecked during this period that were of prognostic importance". This study implies that late recovery

is likely if an active programme of treatment is adopted in hitherto neglected patients. Yet there are instances of late recovery which appear to have occurred spontaneously.

Exceptional cases of this kind are reported at intervals. For example, Boltz (1948) reported spontaneous recoveries in two cases of "advanced schizophrenic organismic stagnation" in whom the prognosis had appeared hopeless. The former was a married woman, aged 29 on admission, who emerged after 6½ years' illness from what had appeared to be a state of catatonic deterioration: at the time of the report she had remained perfectly well for 12 years after discharge, having resumed work as a nurse. Boltz's other case was a man aged 36 on admission who had been severely ill for over ten years. Following his recovery he resumed work on the railway. At first his employers would only allow him to do unskilled work, as they distrusted the capability of a former mental patient; but within a year he had earned re-instatement into his former, more responsible job.

A report from the Menninger Clinic (Mott, 1950) described a still more unexpected recovery in a woman aged 72 who had been in hospital suffering from a paranoid psychosis for 17 years. In spite of her advanced years this patient showed considerable energy and constructive drive. She obtained, and successfully held, a post as companion-housekeeper.

In 1947, while a registrar at the Royal Edinburgh Hospital

for Mental Disorders, the writer came to know a patient who, from 1925 to 1937, had exhibited the symptoms of a severely disturbed, inaccessible catatonic schizophrenic. The illness gradually abated, until ten years later he was found to be leading a quiet, well-ordered existence, working with great regularity on the hospital farm and devoting his leisure to the study of Anglo-Saxon and Norse literature. He could have been discharged from hospital but, lacking a home to go to and fearing a recurrence of his illness, he preferred to remain in the asylum.

An unusual case-report from India (Vahia, 1955) described an illness of rapid onset in a middle-aged man, preceded by a period of agitation and depression occasioned by unjust slanders against his character. The patient became stuporose and remained in this condition (in which he was nursed with devoted attention) for over seven years. Recovery followed soon after an attack of acute malaria, in which the patient had a hyperpyrexia with convulsions. On recovery, the patient's mental state was restored to normal. This case was presented as one of catatonia, but it appears to have much in common with the benign stupors described by Hoch (1921).

Still more recently a report has been published (Woddis, 1957) of a patient who suffered from a single unbroken attack of depressive psychosis lasting from 1918 to 1949 after which, at the age of 69, he made a complete recovery and resumed active

work as a clergyman. During the illness the patient received 20 treatments of E.C.T. without relief of his psychosis; he himself attributed his recovery to his interest in a dog belonging to one of the hospital staff!

These infrequent instances of clinical recovery in seemingly hopeless cases serve as a reminder that in many chronic mental illnesses the patient has not suffered irreversible damage to his mental processes: they encourage one's belief that research in the field of chronic psychosis may yet prove rewarding.

e) Community Follow-up of Mental Hospital Patients

Most of the studies discussed so far have taken measures of clinical state, or the fact of readmission to hospital as their criteria for the outcome of psychosis. It is no less important, however, to investigate the subsequent history of patients who remain out of hospital. The studies to be described in this section have included an attempt to do this, as is shown in the matter-of-fact title of the first to be cited, R.G. Fuller's paper (1935): "What Happens to Mental Patients after Discharge from Hospital".

Fuller set out to ascertain "objective facts, not opinions" about the later careers of 1,193 patients who had been discharged ten years previously from five New York State Hospitals, and

succeeded in obtaining information about 947 (79 per cent). His inquiry was designed to elicit factual data about these patients' social adjustment and behaviour: "how they got along with themselves and others in the normal activities of life". For the men patients, he found that 51 per cent were still living in the community (37 per cent had done so without a relapse) 20 per cent were in mental hospital and 29 per cent had died.

Of those who were living in the community, 68 per cent were rated as well adjusted: "at home and in the community they were assets and not liabilities". Others were being "carried" by their family and their neighbours, and "not a few were a heavy drag on other people". It was noted that men (though not women) patients showed as high a proportion of "good adjustment" in the over-40 as in the under-40 age groups.

An English study carried out at the same period (Wootton, Armstrong and Lilley, 1935) reported a follow-up of 156 patients discharged from Ewell Mental Hospital (now known as St. Ebba's) of whom 131 (84 per cent) were traced between two and six years later. Of these, 59 per cent had remained quite well since discharge, and a further 11 per cent, although still handicapped to some degree, had not been readmitted to hospital. Relapses tended to occur most commonly during the first three months after leaving hospital, with another smaller peak at the end of

the first year. Thirty eight schizophrenic patients (out of 47 who were discharged) were traced; of these, 18 had remained completely well. The authors commented that this argued a more favourable outcome (at least for acute schizophrenic illnesses) than was generally predicted, and concluded: "Further investigation on these lines over a larger group of cases would appear to be profitable."

A subsequent paper (Guttmann, Mayer-Gross and Slater, 1939) reviewed the outcome in 50 out of 54 acute schizophrenic patients under the age of 46 who were discharged from Maudsley Hospital in 1934 and 1935. When followed up in January 1938, these patients were classed as follows: In hospital, 41 per cent; "family invalids", 10 per cent; in the community but showing social defect, 8 per cent; social recovery, 13 per cent; total recovery, 22 per cent; dead, 4 per cent and untraced 2 per cent. This study was remarkable for the care taken to ascertain the level at which patients were functioning in the community. As the authors pointed out, the schizophrenics in their sample were a selected population with a prognosis better than that of unselected schizophrenics. In this series the men patients had a distinctly worse outcome than the women: the percentages who made a good social recovery were 26 per cent and 43 per cent respectively; but the groups were too small for much reliance to be placed on these figures.

A succession of valuable follow-up studies were subsequently reported from the U.S.A. Jacob (1940) examined the correlation of many items of information about dementia praecox patients with their outcome during the five years following discharge from hospital. He identified 30 items which bore a significant relationship to successful outcome. Most of these were the familiar indices of acuteness of onset, age of patient, etc. The statistical analysis surprisingly showed that patients who had been doubly hallucinated and those who had been both suicidal and homicidal showed better-than-average outcomes - presumably because these disturbances were commonest in acute fulminating illnesses of good prognosis. Where information about the patient's subsequent history was obtained from his spouse, parent, sibling or neighbour, child or distant relative, the patient's likelihood of remaining out of hospital diminished in each succeeding group, but these differences were small.

Hoffman, Parsons and Hagen (1941) gave information about the post-hospital adaptation - as of 1939 - of ex-army schizophrenic patients discharged from St. Elizabeth's Hospital between 1926 and 1935 after a mean stay of six months. They identified 194 such patients and obtained follow-up data on 127 (65 per cent). Of these, 51 per cent had had no readmission to hospital. At the time of inquiry, 28 per cent were rated socially well adjusted, 25 per cent were adjusting with some

measure of support, 35 per cent were in mental hospital, 2 per cent in jail and 10 per cent had died.

Balinsky (1947) focussed his inquiry upon factors influencing the vocational adjustment of schizophrenics after discharge from mental hospital. His sample was small, consisting of 21 patients, who had been in hospital for an average of 11 months (range 3-36 months). These were followed up for between 4 and 58 months (median, 12 months), and their adjustment at work rated good, fair or poor. In the analysis of factors believed to be of prognostic importance, the following were found to show no significant correlation with outcome: subtype of schizophrenia, age, number of admissions, amount of work experience, amount of education. Items associated with a favourable outcome were: drive, emotional expressiveness, unimpaired motility and a positive attitude towards status in society. Those in the "poor" category performed incompetently at work, exhibited symptoms and appeared indifferent to the opinion of their fellows. Balinsky argued that these patients should be placed in sheltered rather than in competitive employment.

Another study involving a small number of patients (44 traced out of 47 patients with involutional psychosis discharged from Worcester State Hospital in 1939-40) is of interest because of the effort made to rate social factors in the households to

which patients went on leaving hospital (Malamud, Sands, Malamud and Powers, 1949). The authors conclude: "Of the various factors which determine the ultimate outcome of the illness, one of the most important is the social setting to which the patient has to return." In this study the two most unfavourable factors identified were low economic level, and bad interpersonal relationships in the group.

A more ambitious study was that of Bockoven, Pandiscio and Solomon (1956) who ascertained the social adjustment three years later of patients discharged to the community after an admission to Boston Psychopathic Hospital in 1949. Of 144 such patients, 65 were interviewed, 41 gave information by correspondence only, 19 refused co-operation, 19 were untraced and four were dead. Social adjustment was rated in terms of the Barrabee-Finesinger scale which gives scores for each of the following areas - (1) occupational, (2) economic, (3) family, (4) community adjustment. Patients were most successful in attaining "occupational adjustment" - 80 per cent of the 106 on whom information was available were working at the time of inquiry - and least success in achieving "community adjustment". Schizophrenic patients scored lower on each measure of adjustment than did those with effective psychosis or psychoneurosis.

The post-hospital outcome of patients from an Arkansas State Hospital formed part of a study reported by Leta M. Adler

(1955). Data were obtained from 296 patients living at home at the time of the inquiry; another 30 patients were not co-operative and 70 could not be traced. Of those on whom information was obtained, 75 per cent were still out of hospital one year after discharge but less than a quarter of these were making a full social adjustment, while over 10 per cent were "existing in one-person chronic wards." A feature of this study was Adler's rating of the patient's adjustment to work, family life and social participation in terms of a specially designed series of Guttman scales.

Of the men patients who were still in the community, 32 per cent had worked regularly since discharge and a further 25 per cent were employed at the time of the inquiry, in spite of the fact that many of these still had some symptoms of mental disorder: "The extent to which they are accepted again in community life is an indication of the recovery level attributed to them by their associates. This measure of their recovery is the socially effective one."

In her series, which included a wide variety of conditions, Adler found that the most favourable outcome was shown by married patients who rejoined their spouses.

Two extensive follow-up studies of schizophrenic patients of Gaustad Hospital, Oslo, have been published at an interval of 20 years. The earlier one (Evensen, 1937) reviewed the

subsequent histories of 815 cases of dementia praecox discharged from this hospital between 1915 and 1929. At the time of the inquiry 381 men patients were still alive and of these 20 per cent were earning their living, 20 per cent were receiving financial support, and 60 per cent were in hospital or family care. Former patients (especially those with residual symptoms) were most commonly employed as farm labourers or small-holders.

The later study (Holmboe and Astrup, 1957) described the outcome of 255 patients admitted for the first time during 1938-1950 with a schizophrenic illness of less than six months' duration. The authors visited and examined all patients personally. Their principal aim was to seek clinical features which would differentiate patients who showed a favourable or an unfavourable outcome, but they took into account also evidence of gross environmental stress. Patients whose home environment was rated as showing "social misery and isolation" had the poorest prognosis; but the authors were inclined to believe that these were accompaniments rather than causes of schizophrenic deterioration.

Another quite recent Scandinavian follow-up study (Welner and Strömgren, 1958) was concerned particularly with the question as to whether acute schizophreniform illnesses with a denign outcome could be differentiated on genetic grounds from "true" schizophrenia. The authors found that this was so: the

former conditions represented one of a variety of ways in which patients who were in a non-specific way "mentally vulnerable" might break down under stress. It was observed that in the sample of 71 cases who were followed up after a mean interval of 8.8 years, 41 were rated as showing severe neurotic disturbance and six as psychotic (but not schizophrenic) at the time of the follow-up inquiry; nevertheless, 54 of these patients were working. External factors were stated to have precipitated the psychoses of many of these patients. The assessment of these environmental factors was not carried out in detail, but it was noted that there was an accumulation of mental disorders in the less favourable environments.

A report from Maudsley Hospital (Harris, Linker, Norris and Shepherd, 1956) described a five-year follow-up of 123 schizophrenic patients who had received insulin coma treatment. Their outcome was measured by three indices: (1) the total time spent in hospital during the five-year follow-up period (34 patients had no readmission, 31 were admitted for less than one year, and 58 for more than one year); (2) clinical category at the end of this period (recovered, 37; partly recovered, 38; unchanged or worse, 48); (3) social condition at the end of the period (61 were independent, 20 dependent on the support of others, 42 were resident in hospital). No significant correlation with outcome was found in respect of sex, age, diagnostic sub-group or amount of insulin treatment given. High

correlations were found between the first of the above measures of outcome and each of the others. The patients' social adjustment, however, was not so closely related to their clinical condition: a substantial proportion of those whose clinical rating was poor were found to be able to work satisfactorily.

A group of research workers in Boston has been concerned since 1955 with investigations of factors associated with the outcome of psychotic patients discharged from hospital. Their first report (Davis, Freeman and Simmons, 1957) concerned a group of patients who were still out of hospital two years after discharge. Information was obtained in respect of 43 out of 59 such patients (73 per cent) on the basis of which they were placed in two groups, showing high or low levels of performance respectively. A rating of the patient's work history since discharge was the most important of five measures which contributed to the estimate of his level of performance. "Low-level" performance was commonest in patients who returned to live with their parents, "high-level" performance in patients who went back to a conjugal household. Wives, it seems, expect their ex-patient husbands to work, whereas parents are relatively more willing to let the ex-patient remain dependent. Examination of the figures given in this paper shows, however, that re-admissions to hospital occurred with equal frequency

from conjugal and parental settings.

This team proceeded to test their preliminary finding on a larger sample. Their next publication (Freeman and Simmons, 1958) was based upon follow-up interviews carried out with the relatives of 182 out of 209 men psychotic patients who were known to have returned to family settings after discharge from hospital in 1955 and to have remained in the community up to the time of the inquiry. Again it was found that patients "surviving" in their parents' homes were significantly less often earning their living, and significantly less active in social relationships than were patients who were living with their wives. These differences could not wholly be explained by differences in the level of clinical disturbances in these two groups of patients. Wives, as compared with parents, were again found much less willing to tolerate a mentally handicapped patient in the household.

Only two papers have been found which dealt exclusively with the post-hospital experience of chronic psychotic patients. A Danish psychiatrist (Smith, 1946) followed up 56 women patients whose discharge from St. Hans Hospital, Copenhagen, was accelerated by the exigencies of wartime. All of these patients had been in hospital for more than four years. At the time of inquiry, intervals of from nine months to over three years had elapsed since their discharge. Six patients had been re-admitted;

one committed suicide. Of the 49 who were still in the community 43 were living on public assistance and only six were self-supporting.

A later report from the U.S.A. (Stringham, 1952) described the outcome of 33 men patients discharged from mental hospital after at least five years' continuous stay (mean, 12 years). Of these, 20 were schizophrenics, four manic-depressives, the remainder suffering from organic psychoses. Within the first year 15 of the patients were readmitted to hospital but six were subsequently discharged again. On inquiry, over two years after the original discharge, 24 (72 per cent) of the patients were living in the community, although only half of these were self-supporting. Stringham found that the principal obstacle to a successful discharge was indifference or hostility on the part of the patient's relatives. Other obstacles which he had to overcome were the inertia of "institutionalised" patients and of hospital staff - the latter being aggravated in some instances by the fact that the patient had become a good worker in the hospital. The chief positive factor was found to be whether the patient found gainful employment: all twelve who did so avoided relapse. The author concluded that the psychiatrist should be prepared to exert pressure (upon both patients and their families in some cases) in order to bring about the discharge of chronic patients whose illness has become quiescent, and that

in doing so he should be willing to accept the calculated risk that a proportion of these patients would relapse.

Throughout this bibliographical review a recurrent theme has been the poor prognosis of patients whose stay in hospital has been prolonged for more than two years. It was indeed this general finding which made the isolated cases cited in section (d) above worthy of remark. In the systematic follow-up inquiries which have been discussed, long-stay patients have been very much in the minority, and have been reported as faring badly. The last two studies cited, which were concerned only with chronic patients, showed that even where a substantial number of such patients were discharged, their level of functioning in the community in many cases left much to be desired. It could be argued, however, that all of these were studies carried out in other countries and at other times: the outcome of British patients discharged to the social environment of an English city during the post-war years of full employment might be different. The present inquiry was designed to throw some light upon this question.

CHAPTER 3

DESIGN AND METHOD OF FOLLOW-UP STUDY

(i) Previous Studies of Chronic Psychotic Patients

The selection of chronic psychotic patients for this study was determined by practical as well as theoretical considerations. Since the beginning of 1954 the writer had been engaged, with his colleagues in the Medical Research Council Social Psychiatry Research Unit, in studies related to the rehabilitation of chronic schizophrenic patients in mental hospitals. As a first step, a census was made of all chronic patients in five large mental hospitals near London. This survey (Carstairs, Tonge, O'Connor and Barber, 1955) showed that whereas rapid changes were taking place in the admission and discharge rates of these hospitals, there remained a large proportion of long-stay patients who were relatively unaffected by these changes.

Studies were then carried out to ascertain the peculiar disabilities of chronic schizophrenic patients which would have to be overcome if a programme of rehabilitation were to be effective. This involved investigations of simple and complex psycho-motor processes (Venables and Tizard, 1956a, Venables and Tizard, 1956b, and Tizard and Venables, 1957) and of patients' performance in experiments involving learning both in the laboratory (Venables and Tizard, 1956c: O'Connor, 1957) in a

simulated industrial task and on actual repetitive work in a realistic industrial setting (O'Connor, Heron and Carstairs, 1956: Carstairs, O'Connor and Rawnsley, 1957: O'Connor and Rawnsley, 1959).

At this stage it became apparent that studies were required not only of the individual patients but also of their social environment in the hospital and in the community, as this was considered to contribute (to an extent as yet unknown) to the course of the patients' mental disorder. Two aspects of the hospital environment were studied: the attitudes towards mental patients of 209 staff members from every occupational level in a large mental hospital were measured (Carstairs and Heron, 1957) and it was found that, in general, the more highly educated respondents showed more tolerant attitudes towards the mentally ill; another study measured the extent of communication among patients in the chronic wards of the hospital (O'Connor, Carstairs and Rawnsley, 1957).

As a first approach to the study of the patients' extra-hospital environment, the writer then carried out a pilot investigation of the homes of the first twelve men patients employed in the rehabilitation workshop. These were all schizophrenics, whose ages ranged from 26 to 44, and whose length of stay in hospital from four to 22 years (mean, 7.5 years). Nine of these men had relatives living in London. Visits to

their homes made it possible to appraise the material circumstances of each of these households, the economic status of the patients' kin, and their attitude towards the possibility of his leaving hospital. Seven out of the nine households visited showed very positive feelings towards the absent member - in one house the patient's bed was kept freshly made up although he had been in hospital with little prospect of release for over seven years. Two families showed reluctance to have the patient back in their midst: in both, under the influence of paranoid delusions, the patients had shown great violence towards adult members (a wife and a brother respectively) and had frightened children. The relatives of these two patients were sympathetic to the prospect of the patient's discharge provided that he did not stay in their household: both were subsequently discharged.

The inquiry itself stimulated relatives' interest in these patients, of whose recovery they had begun to despair, and this probably contributed to the fact that during the subsequent year five of the twelve were discharged from hospital, while one escaped and was discharged by the lapsing of his legal certification. This was an illustration of the tendency of social investigations to have an effect upon the phenomena which are being studied.

(ii) Design of Follow-up Inquiry

It was now decided to carry out a systematic inquiry into

the subsequent experiences of chronic psychotic patients who succeeded in leaving hospital, concentrating attention upon male patients under the age of 65 discharged to addresses in the Greater London area. An uninterrupted stay in hospital of two years or more was taken as the criterion of chronicity.

A schedule of inquiry was prepared and tested in a series of pilot interviews with members of households to which chronic patients over the age of 65 had been discharged. As a result of experience gained in these interviews, a final version of the interview schedule was drawn up. The schedule is reproduced in full in Appendix A. It contained questions on 164 items, under the following principal topics:

1. Data on patient's age, length of stay, previous admissions, treatment, legal status, mode of release and condition on discharge - all of which could be obtained from the hospital notes.
2. Details of patient's personal history prior to this admission, his level of education, occupation, marital status, etc. Comparisons were made between the patient's highest levels of occupation and social responsibility and those which he held immediately before this admission to hospital.
3. Particulars of the social group in which the patient was living before entering hospital, with an inquiry into the circumstances of his admission on which was based an empirical

"Index of Social Disturbance" (item 38g).

4. Relevant events in the patient's social group during the period of his stay in hospital.

5, Characteristics of the household to which he went on discharge, including their attitudes towards the mental patient.

6. Details about the patient's health, behaviour and work record during the year following discharge.

7. Consequences to other members of the household or family of the patient's return to life in the community.

Every effort was made, in the preparation of the schedule, to focus inquiries upon particular items, so that subsequent ratings could be based upon facts of observation and not upon the investigator's or his informant's subjective interpretation of events. For example, it was considered desirable to ascertain the degree to which each patient's behaviour was disturbed by reason of his mental illness. In order to do this, informants were asked about nine particular items indicative of abnormal behaviour, and were offered one more general question (Schedule item 58). The answers to these questions were rated both quantitatively and also qualitatively, the latter a global rating: Severely disturbed/Moderately disturbed/Nearly normal.

Of particular importance for this study was the definition of the patient's outcome. This was recorded in two ways: if a patient remained out of mental hospital for a year after the date

of discharge, this was arbitrarily rated as "Success"; if he relapsed and was re-admitted to mental hospital or, as in some cases, to prison before the year was up, this was rated "Failure". It will be appreciated that merely to have remained out of mental hospital does not necessarily imply a high level of social achievement: a more discriminating measure of "Success" is required. Accordingly, every patient who was still living in the community a year after discharge from hospital was given one point for each of the following conditions which he fulfilled: (1) working for at least five out of the last six months; (2) able to look after himself in respect of dress, travelling, use of money, etc.; (3) social relationships with relatives and neighbours not disrupted by symptoms of mental aberration on the part of the patient. Those who scored three points were deemed to show "Full Social Adjustment"; two points rated "Partial Social Adjustment" and one or no points "Poor Social Adjustment".

Finally, in order to obtain a measure of the success of the patient's outcome as it affected not merely himself but also the other members of his household, an assessment was made of the degree of hardship which his presence imposed on others. Patients were as presenting either "severe" or "moderate" or "minimal" social liabilities (item 78).

(iii) Follow-up Interviews

These data were obtained in an interview with a "key informant" who was defined as the person responsible for keeping the house and preparing the main meal for the group in which the patient lived. In many cases the "key informant" was the patient's mother or wife, sometimes another relative or landlady. Where the patient was living alone, he himself was the informant. In cases in which information was found to be inadequate, further interviews were sought with the patient or another member of the household.

The interviews, which lasted from three-quarters of an hour to three hours, were carried out in the patients' homes by the writer and two collaborators, Mr. G.W. Brown (sociologist) and Miss G.G. Topping (social psychologist) who had shared in the preparation of the schedule. The interviews were not rigorously structured, but each interviewer carried a check list in order to ensure that all of the items were covered, and took notes from which the schedule was completed immediately afterwards. In order to preserve uniformity of recording, the three interviewers met once a week during the seven-month period (December 1956 - July 1957) of the home-visiting programme and discussed points of interpretation in the data each was collecting.

The patients to be followed-up were identified by studying

the records of seven large mental hospitals whose catchment areas are in Greater London (Banstead, Bexley, Cane Hill, Claybury, Friern, Springfield and Warlingham Park Hospitals), making a note of all men long-stay patients who had been discharged since January 1950. Patients who were 65 or over at the time of discharge, those who went to live in other parts of the country, and three patients who died (all from natural causes) before the end of the first year following their discharge were excluded from the sample. Two hundred and forty patients were found who fulfilled these criteria. Vigorous attempts were made to locate as many as possible of these men (who included 18 men who had absconded from hospital, and another 40 who had left against medical advice) and ultimately this was achieved for 229 (95 per cent) of the patients. Interviews were carried out and schedules completed in every case. Contrary to expectation, failure to cooperate was rarely encountered. The patients' relatives, with whom the majority of interviews were conducted, in most cases welcomed this display of interest in their progress: and this was especially true of the few instances in which the patient himself appeared to resent the inquiry. On many occasions, both relatives and patients at first greeted the interviewer with some suspicion, fearing that the patient continuing in the community might be jeopardised, but these fears were generally soon allayed. Four

mothers, who on this account repeatedly refused requests for an interview were each finally persuaded to collaborate by the writer's personally explaining the situation to their General Practitioner who then acted as an intermediary and reassured them that they had nothing to fear. One of these proved to be a harassed and emotionally unstable widow, who grudgingly conceded an interview with the writer on her doorstep. In the background one was able to distinguish the figures of our patient (a chronic schizophrenic) and of his brother who was an adult mongol imbecile. In this case the deficiencies of an inadequate interview were made up by consultation with the local authority's welfare officer whose responsibility for the supervision of the mongol youth required her to make regular visits to this household.

As is inevitable in inquiries of this type, acute social and clinical problems were uncovered in a proportion of the families visited. Whenever possible, patients and their relatives were referred back to the hospital with which they had been in contact; alternatively, they were invited to attend a clinic for psychotic out-patients conducted by the writer at Maudsley Hospital.

(iv) Analysis of Findings

In designing the interview schedules, provision was made for the recording of as many items as possible on Hollerith

punch-cards. By providing a space in the right-hand margin for the Hollerith code number, the need to employ a separate transcription sheet was obviated. On completion of the interviewing programme, a set of Hollerith cards was prepared (one card for each patient); subsequently a set of large Cope-Chat cards was punched with a limited number of the more important items because it was found that hand-sorting was more practical in the analysis of items in small sub-groups of patients.

In the first analysis, the cards were divided into two groups: those of patients who had succeeded in remaining out of hospital for a year, and the "failures". Each several item of information could then be tested for its association with this criterion of success or failure. Where distributions appeared to be unequal, chi-squared tests of significance were applied, and only when the probability of such a distribution's occurring by chance was less than one in twenty ($p < 0.05$) was the association accepted as a significant one.

Subsequently the same procedure was adopted with the cards of patients who remained in the community in order to test the association of selected items with the three-fold rating of "Level of Social Adjustment".

The crude associations revealed in this way between single items and the two criteria of outcome were then re-examined by

means of tabulations which took more than one factor into account. For example, the rating of patients' condition on discharge from hospital was found to be very significantly associated with their outcome; it was therefore advisable to control for this variable as a check upon the meaningfulness of associations shown between other variables (such as the type of household to which they went, or their occupational record) and their degree of "success".

CHAPTER 4

FINDINGS OF THE INQUIRY

(I) Characteristics of the Patients Studied

Of the 240 discharged chronic patients identified from hospital records, 11 could not be traced. Nine of these were diagnosed as schizophrenic, one as a depressive and one as a psychopathic personality. The records of the Board of Control were examined in order to see whether any of these patients had been readmitted to a mental hospital. No such readmission was recorded; but it remains possible that they may have been admitted under a different name, or under the informal procedure of de-designated units, or to prison.

At the time of their discharge the 229 patients on whom information was obtained were diagnosed (as shown in the hospital records) as follows (Table 1):

TABLE 1

DIAGNOSIS OF PATIENTS STUDIED

Diagnosis	No. of Patients
Schizophrenia	156
Affective psychosis	30
Epilepsy	18
Organic psychosis	13
Psychoneurosis	9
Psychopathy	2
Mental deficiency	1
Total	229

Schizophrenic patients accounted for 68 per cent of the total. Since these formed the only diagnostic group with really substantial numbers, their characteristics have been separately analysed, as also (where they differed from the rest) have those of the next largest group, the patients with affective psychoses.

Age on discharge

Mean age of schizophrenics - 39.4 years

Mean age of others - 45.0 years

Affective psychotics - 50.8 years

There was a marked contrast between schizophrenic and affective psychosis patients in this respect. Four-fifths of the former, but only one third of the latter group were under 50 on discharge.

Marital status on discharge

Of the 156 schizophrenics, 124 (79.5 per cent) were single at the time of discharge; 15 (9.6 per cent) were married; 17 (10.9 per cent) were widowed, separated or divorced. Of the patients with other diagnoses, 31 (42.5 per cent) were single, 19 (26 per cent) married and 23 (31.5 per cent) widowed, separated or divorced.

Patients' occupational level

In rating the level of occupational status achieved by the patient before and after his illness, the Hall-Jones scale (Glass, 1954) was employed, with the slight modification that

its categories 5A and 5B were treated separately, so that the scale became an 8-level instead of a 7-level one. The last occupation before their admission to hospital was rated as Routine non-manual for 20 (8.7 per cent) of the patients; as Skilled manual for 27 (11.8 per cent); as Manual semi-skilled for 39 (17.0 per cent); as Manual routine for 75 (32.8 per cent). Fifty-seven patients had had no regular employment during the two years preceding this admission. Only insignificant numbers of patients were found in the higher reaches of employment: one each in Professional, Managerial and Higher-grade supervisory and eight in Lower-grade supervisory positions. There was no significant difference between schizophrenic and non-schizophrenic patients in this respect; and both classes of patient showed a similar degree of occupational decline when the status of their last job before admission to hospital was compared with that of the highest occupational level which they had previously reached.

Length of stay in hospital (current admission)

The mean length of stay was the same for schizophrenics and for patients of all other diagnoses: 6.5 years. That for patients with affective psychosis was 5.5 years.

First or subsequent admission

31.4 per cent of schizophrenics and 43.8 per cent of the patients with other diagnoses were first admissions.

Length of stay in hospital (all admissions)

Schizophrenics had spent in all a mean period of 7.5 years in mental hospital; other patients, a mean of 6.8 years (affective psychoses, 6.3 years).

Treatment in hospital

This study was not designed in such a way that the efficacy of alternative methods of treatment could be tested. The date of the inquiry precluded the possibility of many patients' receiving tranquillizing drugs. In all, 31 had been so treated. Forty of the schizophrenic and three of the other patients had been leucotomised.

Patients' condition on discharge

Some indication of the degree to which the patient was psychiatrically well or ill at the time of leaving hospital was given by the following three observations:

(1) Manner of discharge

Thirty-one per cent of the schizophrenic and 15 per cent of the other patients were discharged against advice.

(2) Category on discharge

Of the schizophrenics, 14 per cent were recorded as "recovered", 65 per cent as "relieved" and 21 per cent as "not improved"; of the other patients, 13 per cent were rated recovered, 77 per cent relieved and 10 per cent not improved.

(3) Level of behaviour while at home

From answers to the questions about aspects of the patients' behaviour (item 58 of the schedule) it was possible to rate their mental condition, as perceived by the informants, in three categories. Patients were considered to be severely disturbed if their behaviour was so abnormal as to interfere seriously with their social life: all of these patients could have been certified as of unsound mind. Patients who showed quite evident peculiarities, but who were nevertheless able to go about their affairs without causing undue distress to themselves or to others were rated as moderately disturbed. Patients whose symptoms, if any, were not conspicuous were rated nearly normal.

Twenty-six per cent of the schizophrenic patients were judged to be severely disturbed, 35 per cent moderately disturbed and 39 per cent nearly normal. Of the other patients, 19 per cent were severely disturbed, 36 per cent moderately disturbed and 45 per cent nearly normal. Of the 30 patients with affective psychosis, 16 were nearly normal and only 5 (17 per cent) were rated as severely disturbed in their behaviour.

(II) Characteristics of the Environments to which Patients Returned

Type of household

A larger proportion of the schizophrenics (55 per cent) than of

the patients with other diagnoses (22 per cent) returned to live with their parents; only three (10 per cent) of the affective psychotics did so. The percentage of patients from each group who went to a number of alternative destinations was as follows: to their wives, nine per cent of schizophrenics and 23 per cent of non-schizophrenics (11, or 37 per cent of affective psychotics went to marital settings); to stay with other relatives, 15 per cent of schizophrenics and 16 per cent of the others; to lodgings in private houses, 12 per cent of the schizophrenics and 14 per cent of the others. Thirteen schizophrenic and eleven other patients lodged in large Salvation Army Hostels or in Rowton Houses; eight patients were discharged to mental after-care homes.

For 71 patients (31 per cent of the total) the household to which they went on leaving hospital was different from that in which they had been living prior to their admission.

Attitudes of others to patients' return

One hundred and eighty eight patients went to stay in households whose members knew about their mental illness. Of these, the majority (78 per cent) were actively welcomed; in 20 households they were accepted with mixed feelings, and in 14 they were definitely unwelcome. The latter attitude was shown most commonly towards patients who had absconded from hospital or who still showed evidence of mental disorder, but in a few

instances patients whose conduct was apparently nearly normal met with a markedly hostile reception.

Apart from their immediate household, 160 of the patients were in touch with other relatives, whose attitudes were reported by the informant to be helpful to 54 per cent of these, neutral to 26 per cent, and mainly hostile to 20 per cent. Neighbours' attitudes could be rated in relation to 204 of the patients. These were described as positively helpful in 26 per cent of cases, neutral in 65 per cent, and mainly hostile in nine per cent.

Social class of household

It was not found possible to obtain reliable information on the economic status of the patients' households. The interviewers did, however, record details both of their material circumstances and of the level of education, the attitudes and the social identifications of the informants. From these observations it was possible in all but twelve cases to categorise the patients' environments as follows: Middle-class - 21 per cent; Working class with middle-class aspirations - 10 per cent; Working class - 69 per cent. Schizophrenic and other patients were distributed in similar proportions in these three types of environment.

(III) Patients' Outcome

(a) Readmission within one year

Of the 229 patients, 73 (32 per cent) were readmitted to

hospital within twelve months of being discharged; the other 156 (68 per cent) succeeded in remaining in the community for at least one year. Since information was obtained on patients who had been discharged at dates varying from just over a year up to seven years before the time of inquiry, it was possible to calculate the frequency of relapse in each succeeding year following discharge. These calculations showed that of all patients who relapsed during the seven years following discharge, 74 per cent were likely to do so during the first year.

The percentage who failed during the year was remarkably similar for schizophrenics (31.6 per cent) and for patients of other diagnoses (32.9 per cent). Of the 30 patients with affective psychoses, 10 (33.3 per cent) relapsed within the year.

(b) Level of social adjustment

Of the 156 patients who were still in the community one year after discharge from hospital, 62 (40 per cent) were rated as displaying full social adjustment; 40 (26 per cent) fell short in one of the three basic social attainments and were rated as partially adjusted; 53 (34 per cent) showed poor social adjustment. One patient's social adjustment rating could not be made because reliable information was not obtainable. The numbers of schizophrenic, affective psychotic and other patients who fell into each of these categories are shown in Table 2.

TABLE 2

OUTCOME IN THE TOTAL SAMPLE,
BY DIAGNOSTIC GROUPS & LEVELS OF ADJUSTMENT

Diagnostic Group	Social Adjustment in Community			Readmitted to Hospital
	Full	Partial	Poor	
Schizophrenics	39	27	40	49
Affective psychotics	11	7	2	10
Other patients	11	7	11	14

(The adjustment level of one schizophrenic patient who remained in the community for a year could not be rated.)

The following examples may give an indication of the type of outcome associated with patients at each social adjustment level.

(i) Full social adjustment

Case No. 52 R.M. (paranoid schizophrenic), aged 31 when discharged after three years' stay in hospital. During his illness he had been hallucinated, and had delusions which led him to attack his wife. She took no interest in him during his stay in hospital. He was leucotomised, and his condition improved. On discharge he found his wife living with another man. He succeeded in obtaining work and lodgings without delay, divorced his wife, and three years later married another

woman. He still has ideas of reference, and at times auditory hallucinations but he works regularly in a paint factory and is on good terms with his wife.

Case No. 219 J.S., aged 31, has been admitted many times to mental hospital for schizophrenia, the latest admission being from 1949 - 1955. Towards the end of this time his father died. Patient ran away from hospital, avoided recapture for 14 days and then returned home. He has worked regularly as a labourer. In the Whitechapel street where he lives with his mother and brother he is well known and his minor eccentricities are condoned. His mother is grateful for his company and he reciprocates this in an inarticulate fashion.

Case No. 214 W.O., aged 59 when he left hospital against advice in 1954, after four years' treatment for chronic hypomania. His wife, who had experienced many difficulties on his account in the past, was sympathetic towards him but did not wish to resume full marital relations. He lives in a private room in a Rowton House but takes his evening meals with his wife and daughter in their furnished rooms.

(ii) Partial social adjustment

Case No. 105 W.K., aged 43 on discharge from hospital in 1950 after four years' treatment for hysteria. Has worked almost un-interruptedly as labourer. Shares a squalid, ill-kept room in Woolwich with his slatternly, dull-witted wife. They quarrel

frequently but make it up again. He is grossly impractical, especially over money, so that they are often in financial straits.

Case No. 25. C.F., aged 37 when discharged in 1955 after two years' treatment for paranoid schizophrenia. Three previous short admissions, during one of which he was leucotomised. Before this admission lived with his parents, but they became involved in his delusions and he quarrelled violently with them. Since discharge has lived in lodgings. Leads quite an active social life, accepted as an eccentric member of a debating society. Tends to lose jobs because although his work is faulty he becomes very indignant if criticised.

Case No. 282 F.L., aged 22 when discharged in 1956 after three years' treatment for hebephrenic schizophrenia. Treated unsuccessfully with insulin coma therapy and leucotomy; but improved greatly on chlorpromazine, which he continues to take. Lives with his parents, does a simple factory job. He is on good terms with his parents and workmates but shows childlike dependence towards both in all practical matters.

(iii) Poor social adjustment

Case No. 87 E.B., aged 35 when discharged in 1951 after seven years' treatment for epileptic psychosis. Stayed in a boarding house for young working men. Patient succeeded in obtaining labouring jobs without difficulty, only to lose them

when he had a fit. He frequently neglected to take his anti-convulsant drugs and then fits would become more frequent and he would become noisy and quarrelsome. His landlady was unusually tolerant of his condition because she had had a brother who was epileptic.

Case No. 5 J.C., aged 51 on discharge in 1950 after two years' treatment for a depressive psychosis. Owing to serious pulmonary disease he was not fit to work, but his wife was extremely glad to have him home. She suffers from paranoid delusions which he partly shares. He is the only person in the world whom she does not view as a persecutor. They lead a bizarre, completely isolated life together.

Case No. 224 F.W., aged 50 on discharge in 1956 after seven years' treatment for schizophrenia - he has spent altogether 18 years in mental hospital, during which time his wife left him. He went to live with his unmarried sister, who helps him financially. He has not been able to work, though he does odd jobs in the house. He is extremely quiet and withdrawn. His sister said "Living with Fred about the house affects me mentally. He doesn't speak. He's like a ghost in the house."

(c) Social liability caused to others

The two criteria of outcome described above both give an indication of how well the patient fared; but mental illness, to a greater extent than most forms of physical illness, tends

to cause inconvenience and at times quite severe distress not only to the patient but also to those persons with whom he regularly comes into contact. This aspect must also be taken into account in assessing the outcome of patients discharged from mental hospital.

A three-fold rating was accordingly made of the amount of hardship imposed upon other members of the household as a result of the patient's presence. Unlike the rating of social adjustment, this was carried out for every patient, not only for those who succeeded in remaining out of hospital.

Severe liability was rated in cases where the patient's behaviour was extremely disturbed and caused very considerable distress to others in the household. The commonest causes of such distress were violence and threats of violence by the patient; others included paranoid accusations, depraved sexual behaviour, and threats of suicide. This rating was accorded to 38 (11 per cent) of the 229 patients.

The following cases illustrate this category:

Case No. 9 C.J., aged 52 when discharged after three years' treatment for paranoid schizophrenia. He had a leucotomy, with little benefit. Later he improved greatly on chlorpromazine, was regraded to Voluntary status and soon after this took his discharge. He resumed his former work as window-cleaner, living in a small flat with his older foster-sister. He did not

continue to take chlorpromazine; soon became very strange in his behaviour, seldom speaking to his sister, giving her less than his share towards household expenses and flying into a rage when his eccentricities were remarked upon. She lives in fear of him ("He looks under his eyes daggers at me") but does not dare to complain.

Case No. 42 W.H., aged 43 when discharged against medical advice in 1954 after four years' treatment for chronic schizophrenia. He lived with his 75-year-old mother in a basement flat. He was incapable of working and his behaviour was quite disturbed. His mother showed extreme tolerance of his inconsiderate and at times degraded behaviour although his married brothers and sisters urged that he should be returned to hospital: finally, after two years at home, they found him attacking his mother and insisted on his being certified.

Case No. 153 W.H., a manic-depressive patient, aged 57 when he discharged himself against advice in 1955 on the occasion of his son's wedding. During the course of his prolonged illness he had alienated his sisters and his friends, and his wife divorced him. Following this discharge he lived in a hotel, where he attracted attention by his argumentative and provocative behaviour, which culminated at the end of three weeks in his walking about the premises naked. This led to his re-admission.

Re-rating moderate liability was made when the patient's

presence made demands upon others, but of a less extreme variety - for example, requiring them to curtail their former social activities, or to suffer considerable social embarrassments. Sixty-four patients (28 per cent) caused their hosts this appreciable amount of inconvenience. Examples are:-

Case No.194 J.D., a schizophrenic man of 27 who went to hospital for two years in 1952-54 after attacking his step-father. Since he took his discharge he has remained at home unemployed, living in his own room, refusing to join the rest of the family at meals or in any social contacts. He is humoured and kept in pocket money by his very indulgent mother.

Case No. 195 G.D., aged 41 when he absconded from hospital in 1955 after two years' treatment for a "depressive psychosis in a life-long inadequate psychopath." He returned to his family, a close-knit Jewish one, which was very tolerant of his inability to obtain steady work: a mentally unstable sister was also maintained in this home. After months he became severely depressed, stopped eating; was persuaded by his G.P. to return voluntarily to hospital for further treatment.

Case No. 270 H.S., a schizophrenic aged 40 when discharged from hospital in 1952 at his mother's request, after nine years in hospital. He was inert and apathetic, and incapable of work. Although his behaviour was not conspicuously disturbed, his mother found his presence so disturbing that she suffered a reactive

psychosis and was admitted temporarily to an Observation Ward, while the patient was returned to hospital.

More than half of the patients (117, or 55 per cent) appeared to give rise to little or no trouble to others in their vicinity and were rated as minimal social liability.

As one might expect, the majority of patients (30 out of 38, or 79 per cent) who presented a severe liability to others were returned to hospital within a year. The eight who remained at home (four with their parents, three with their wives, and one - Case No. 9 above - with his foster-sister) did so only because of great sacrifices (not always willingly offered) on the part of others in their household.

On the other hand, more than half (36 out of 64, or 56 per cent) of the patients who presented a moderate degree of inconvenience to others were still in the community at the end of one year. One hundred and twenty seven presented very little trouble to others; only 15 (12 per cent) of these returned to hospital, eight of their own choice, as voluntary patients, seven being referred by medical or social agencies after a return of their symptoms.

CHAPTER 5

CLINICAL FACTORS ASSOCIATED WITH OUTCOME

In evaluating the contribution of particular factors towards the patient's outcome, the association was studied of each factor in turn with the criterion of remaining out of hospital for one year, and also (where appropriate) with the second criterion, the patient's level of social adjustment. These associations will be discussed for the entire sample of patients, with comments on respects in which patients with schizophrenia and those with affective psychosis differed from the rest. The remaining clinical sub-groups were considered too small to justify separate analysis.

The relationships of clinical factors to outcome will be discussed in this chapter, those of social factors in the succeeding one. In Appendix B, tables are given showing the outcome of patients in the various categories with results of chi-squared tests for the significance of these distributions. These tables are presented under the numbers of the relevant items in the schedule of inquiry.

Diagnosis

As has already been indicated, the proportion of survivors in the community to patients who were readmitted was the same

(2 to 1) in each diagnostic category. Social adjustment ratings of the surviving schizophrenic patients were distributed less favourably than those of patients with other diagnoses, but these differences fell well short of significance (Item 70;* $P > 0.3$). On the other hand, patients with affective psychoses who remained in the community displayed a level of social adjustment significantly better than that of the total group (Item 70; $P < 0.05$).

Age

Patients were grouped by age on discharge into 5-year periods. No significant difference was found in the proportion of relapses with increasing age in the total group (Item 12, i). This was also true of the patients with affective psychosis, who were over 50 on discharge in two cases out of three. The schizophrenics were a younger group: four out of five were under 50 on discharge. In schizophrenic patients only the two oldest age-groups showed an outcome different from the rest: of the 17 schizophrenic patients over the age of 55, all but two remained out of hospital for at least a year (Item 12, ii).

No significant differences were noted in the distribution of levels of social adjustment among the different age-groups in the total sample. When the schizophrenic patients were separately analysed by age, however, it was found that the

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* The figures for this and all other tabulations cited are given in Appendix B.

patients aged 20-34 on discharge had significantly lower social adjustment ratings than the older schizophrenics (Item 12, iii; $P < 0.01$).

Duration of Hospital Stay

Neither the duration of the present stay in hospital, nor the total duration of all periods in hospital was significantly related to the outcome of any of the groups of patients, with one single exception: schizophrenics who had spent more than 15 years in hospital tended, if they succeeded in remaining in the community, to show a higher level of social adjustment: This group contained several of the patients over 55, whose better adjustment has already been noted.

Duration of Illness (from earliest symptoms to date of discharge)

In the total group of patients, it was found that those whose illness was of less than four years' duration were more likely to remain in the community after discharge (Item 23; $P<0.01$). Similar trends, which did not, however, reach the five per cent level of significance, were observed in the schizophrenic and affective psychotic sub-groups (Items 23; Tables (ii) and (iii)).

Number of Previous Admissions

In the total group of patients, readmission to hospital within one year was found more commonly in those patients who had

had any previous admissions to hospital (Item 14; P <0.05), and still more so in patients with three or more previous admissions (Item 14; P <0.001). Schizophrenic patients, however, showed a significant rise in the rate of readmissions only in the small group of 27 patients (17 per cent of all schizophrenics) who had been in hospital three or more times previously; of these, 15 relapsed within the year (P <0.01). On the other hand, relatively more of the patients with other diagnoses had never been in mental hospital before, and in this group of 35 patients only three relapsed. The prognosis for the 41 non-schizophrenic patients with any number of previous admissions was found to be very significantly worse: 21 of these patients relapsed (P <0.001).

In none of the subgroups of patients was the number of previous admissions related to the level of social adjustment attained by those who remained in the community.

Treatment During Present Admission

Neither the 31 patients who were treated by ataraxics nor the 43 who had been leucotomised during this or an earlier admission showed an outcome significantly different from the rest (Items 19, 20).

After-care

Only 37 of the 229 patients (16.2 per cent) were found to

have attended even once at an out-patient clinic for follow-up treatment. One or more visits were paid by a psychiatric social worker to the homes of 39 patients (17 per cent). In neither of these small groups was there any significant difference in the proportion who remained in the community (Items 67a, 67b).

Physical Health of Patient and of Others in the Household

A note was made of all patients who suffered from a physical disability (in some cases associated with their mental illness, in many cases not) of sufficient severity to interfere with their working capacity. Of the total number, 57 patients were found to have such a disability; but readmissions to hospital (15 were readmitted) did not occur to a significantly greater extent among these patients.

Only 22 (14 per cent) of the schizophrenics, as compared with 35 (48 per cent) of the patients with other diagnoses had to contend with an additional physical handicap; but when this was present in schizophrenic or in other patients their outcome was not significantly different.

On the other hand, there was a significantly greater likelihood of readmission for patients who went to a household containing another person suffering from an incapacitating illness (Item 66a; $P<0.05$).

Number of Relatives Treated in Mental Hospital or Who Died by Suicide

Of the entire sample nearly one-third (31.4 per cent) reported a family history of mental illness. Fifty patients were found to have one other declared case of mental illness in the immediate family; 22 patients had more than one afflicted relative. The likelihood of readmission to hospital did not differ significantly from that of the total sample in either of these two groups; nor in the group of patients with no known psychotic relatives (Item 74).

Patients' Clinical State on Discharge

No direct measure was available of the degree of psychiatric disturbance still evident at the time of the patient's leaving hospital, but indications of this were available from the following three types of data:

(a) Leaving on or against advice

For the total group of patients, and for schizophrenics, leaving in accordance with the doctor's advice was significantly associated with survival in the community (Item 21a; $P < 0.001$ in both cases) and also with the level of social adjustment of surviving patients ($P < 0.01$ for both groups). The smaller group with affective psychosis showed trends in the same direction. On the other hand, of the 18 patients who discharged

themselves by absconding, 11 survived and seven returned to hospital; their outcome was clearly better than that of the other patients discharged against advice.

(b) Category on discharge: recovered, relieved or not improved

This criterion was also significantly associated with survival in the community (Item 22, i; P <0.001) for the total group of patients. In the 156 patients still in the community one year after discharge, this rating was significantly associated with their social adjustment level (Item 22, ii; P <0.01).

(c) Rating of level of behaviour

This criterion showed a high degree of association with survival in the community (Item 60b; P <0.001) for all groups of patients. Its association with the social adjustment level of surviving patients was necessarily high because they were based on similar observations.

Besides the global rating of disturbance of behaviour (Item 60b) information was sought as to whether the patient showed particular disturbances viz. uncontrolled temper, violence, strange ideas freely expressed, talking aloud to himself, defective emotional response, disordered sexual conduct, neglect of his appearance, and avoidance of social contacts. The presence of each one of these items - except the last - was associated with an increased likelihood of relapse; so also was a measure of the number of such traits exhibited (Item 60a; P <0.001).

It is clear that the patients' clinical condition at the time they resumed life in the community played a large part in determining the degree of success they achieved. It is therefore necessary to take this over-riding factor into account in appraising the contribution to their outcome of the social factors to be described in the next chapter.

CHAPTER 6

SOCIAL FACTORS ASSOCIATED WITH OUTCOME

Many of the social factors studied in this inquiry were found to be related to the patients' success or failure following discharge; but two factors - the patient's work record after leaving hospital and the type of household in which he went to live - were found to be of particular importance and will be discussed at greater length below.

Among other factors associated with patients' outcome were the following:

(a) Level of Social Attainment Prior to Admission to Hospital as indicated by their level of employment (Item 33; $P<.02$); their formal status in the household (Item 45; $P<.05$), and their ability to act in accordance with this status (Item 46; $P<.001$); whether they had been supporting dependents, or self-supporting, or themselves dependent on others (Item 36; $P<.02$).

(b) Level of Social Attainment After Discharge

This measure of social responsibility was repeated one month and one year after the patients' discharge (Items 50, 55). On each occasion a high level of responsibility was associated with (and indeed partly reflected) a high rate of success during the follow-up period. This association was still strongly present

when only patients rated moderately disturbed were considered (Item 55; table ii; P<.001) so it was not simply due to the fact that the less disturbed patients tended to achieve higher levels of responsibility.

It was noted that relatively fewer schizophrenics than affective psychotics were supporting dependents after discharge from hospital and relatively more were themselves dependent (Item 50, table ii; P<.001). In both diagnostic groups, however, the association between success and social responsibility remained - with one interesting divergence: when a husband returned from hospital but proved incapable of acting as bread-winner for his family, his survival in the community was apparently more likely if he suffered from affective psychosis than if he were a schizophrenic. Of eight such handicapped husbands who had had affective psychoses, only two relapsed (neither of whom had resumed marital life after leaving hospital) whereas of thirteen schizophrenic husbands in the same position eight relapsed. This distribution, although suggestive, could have occurred by chance (Item 50, table iii; P>.05).

(c) Marital State on Discharge

This difference between the outcomes of married men handicapped by two different forms of illness prompted a re-examination of the patients' marital state on discharge (Item 47, table i) which on first analysis appeared to bear no relation

to relapse rates. It was found that the experience of married schizophrenic and non-schizophrenic patients differed in the following respect: the schizophrenic patients had a worse-than-average prognosis if they returned to their wives, but a much better-than-average expectation of survival in the community if their marriage had come to an end (Item 47, table ii; $P<.02$). For non-schizophrenic patients precisely the reverse was the case (Item 47, table iii; $P<.001$). Schizophrenics appeared to tolerate the solitary state better than did the other patients; and the wives of schizophrenics appeared to find it less easy to tolerate unemployment on the part of their husbands than did the wives of non-schizophrenics: six of the seven schizophrenic husbands who relapsed were unemployed, whereas six of the sixteen non-schizophrenic husbands who survived were also unemployed.

(d) Financial Contribution to the Household

Not surprisingly, it was found that, when a patient's return represented a positive financial gain to the household which he joined, he was more likely to remain out of hospital than when this was not the case (Item 53g; $P<.01$). This variable must, however, be largely controlled by the factor of the patient's clinical condition. When it was re-examined in the case only of patients rated "moderately disturbed", the association with outcome was no longer significant (Item 53g, table ii).

(e) Help from Outside the Household

It was also found that of the 44 patients who had a friend or relative, not a member of the household in which they lived, who helped them and accepted some degree of responsibility for them, only seven relapsed within the year; this factor therefore significantly enhanced their chances of success (Item 63; P<.02).

(f) Social Class of Household

The social class of the household in which the patient went to live could be rated with some confidence for 216 out of the 229 patients as being either middle-class, working-class, or working-class with middle-class aspirations. Patients going to these different settings showed no significant difference in their rates for survival in the community, although those in middle-class settings fared rather worse than the rest (Item 75, table i). Among patients surviving in the community, the small group in the intermediate type of household showed more instances of poor social adjustment, but this again fell just short of the P<0.05 level of significance (Item 75, table ii).

(g) Social Disturbance and Change of Household

A more surprising finding was the negative one, that patients' success in surviving in the community was not associated with a rating of the amount of social disturbance to which their psychoses

had given rise at the time of admission to hospital (Item 38g). Further analysis of this item showed, however, that this finding was due to the fact that many patients left hospital to join a group different from the one in which they had formerly been living. For these patients there was certainly no association between previous social disturbance and subsequent outcome. If only those patients were considered who returned to the same household, there did appear to be a clear relationship between social disturbance before admission and early relapse after discharge. This could, of course, be attributable to the fact that patients who were more psychiatrically disturbed at the time of discharge were more likely to be those who had caused disturbance before admission; however, if only patients rated "relieved" on discharge were considered, an association still remained, (for "relieved" patients of all diagnosis the association fell just short of the required level of significance but if only schizophrenic patients were considered $P<.05$).

The fact of returning to live with a domestic group <u>different</u> from that in which he had lived before admission was found to be associated with a patient's chances of surviving in the community: but here again the experience of patients of the two major diagnostic groups was different. Schizophrenic patients tended to do better if they went to a new household after leaving

hospital, whereas patients with affective psychoses fared worse if they changed households, (Item 49a, tables i and ii; P = .05).

TYPE OF HOUSEHOLD TO WHICH PATIENT WENT

There was a significant difference in the readmission rates of patients who went to different types of household on discharge. Those who went to any of a variety of institutions (after-care homes, Salvation Army shelters or Rowton Houses) showed least success; a more favourable outcome was shown (in ascending order) by those who went to live with parents, wives and other relatives: those who went into private lodgings had the lowest readmission rate (Table 3; see also Item 48, table i: P<.001).

TABLE 3

OUTCOME IN DIFFERENT TYPES OF HOUSEHOLD

	Survival	Relapse
Institutions	15	17
Parental	63	39
Marital	23	8
Other Kin (mainly siblings)	29	7
Lodgings	26	2
	156	73

This was an unexpected finding, and demanded closer examination. It was noticeable that the schizophrenics, being a younger group and with a greater preponderance of unmarried men than the rest, were more likely to return to their parents; but neither diagnosis nor age was related to outcome, so these factors were not sufficient to account for the differential success rates in different types of household.

Another intervening factor to be considered was the patient's clinical condition on discharge. It could be argued that parents and wives would be more likely than other persons to accept a mentally disturbed ex-patient in the first place. This did in fact happen: relatively more patients rated "not improved" went to live with their parents. Nevertheless, the contrast between the outcomes of patients who went to their parents and those of patients living in any other type of private household remained at a significant level even if only those patients rated "relieved" on discharge were considered (Item 48, table ii; $P<.05$).

This differential outcome must necessarily be the result of a number of contributing factors, some of which were made the subject of particular inquiries. For example, survival in the community was clearly related to the attitude towards the patient's return shown by the key person in the household both

in anticipation of his discharge (Item 41h; P<.001) and after his return from hospital (Item 72; P<.001). It was clear that patients whose presence was welcomed not merely by the informant but by everyone in the household had much the best outcome (Item 73; P<.001). Another evidence of this was shown in the fact that patients whose presence gave rise to complaints by other members of the household had a conspicuously unfavourable outcome (Item 61a; P<.001). A less subjective indication of stresses imposed on the group was given by the observation that when the patient's return imposed definite restrictions upon the activities of other members of the household, he was less likely to remain out of hospital (Item 61d; P<.001). In the assessment of these descriptions of other persons' reactions to the patient's return it has to be remembered that the information was obtained one or more years after the event. The informant's recollections might therefore be biassed by their knowledge of occurrences in the patient's later history.

It was interesting to note that only 32 informants considered that the patient "might be dangerous" although there was a history of severe social disturbance prior to admission for 67 patients, and of actual violence in the household following discharge for 50 patients. Where this view <u>was</u> expressed, patients were much more likely to be readmitted to hospital (Item 71d; P<.001).

Patients in the two principal diagnostic sub-groups showed associations of outcome and domestic group which differed significantly from those of the total sample. The schizophrenic patients fared worst when they went to the large barrack-like working men's hostels, or to their wives; those who went to live with their parents stayed out of hospital in a higher proportion of cases, but much the best survival rate was shown by those who went to live with remote kin or with landladies (Item 48, table iii; $P<.01$). On studying their individual histories it appeared probable that these patients reacted badly on the one hand to being thrown entirely on their own resources (as in the hostels) and on the other hand to being exposed to close and inescapable personal relationships (as in parental and marital households). In living with remoter kin or in lodgings these patients were able to enjoy a measure of social support in that their material needs were looked after, but they were not obliged to form close personal relationships with their fellow household members. Before venturing to place emphasis on the part played by these environmental differences in the associated differences of outcome, it is necessary to consider whether the findings could be accounted for by the clinical state of patients in the respective groups. It was found, however, that if only those schizophrenics who were rated "relieved" on discharge were

considered, the differences in these two types of setting remained highly significant (Item 48, table iv; P<.01).

The affective psychotic patients differed quite markedly from the schizophrenics in their survival rates in the various types of household (Item 48, table v); in that all eleven of these patients who returned to their wives stayed out of hospital, whereas those who went to remote kin or lodgings did relatively badly - seven out of 16 were readmitted. Only three patients in this group returned to their parents; and all three relapsed. Mention has already been made above of the greater readiness of the wives of non-schizophrenic patients to tolerate their husbands' being at home and unemployed. The affective psychotic patients showed themselves less able than the schizophrenics to survive in those social settings where there was an absence of close personal relationships.

The levels of social adjustment shown by patients of all diagnoses who survived in the community were also differently distributed in the several types of household: significantly more of those living with their parents were rated as poorly adjusted (Item 70, table iii; P<.01). This could again be due to the greater readiness of parents to accept patients who were still sick; but if only patients rated "relieved" on discharge were considered it was still found that lower levels of social

adjustment prevailed among the patients who remained in parental households (Item 70, table iv; P<.05). When patients surviving out of hospital in their parents' homes were compared with those remaining with their wives, however, the difference in social adjustment levels fell just short of significance (Item 70, table iii).

The lower level of social adjustment in parental households was shown also by the schizophrenic patients (Item 70, table xv v; P just over .05) and this association actually became stronger when only those schizophrenic patients rated "relieved" at the time of discharge were considered (Item 70, table vi; P<.05) so that it could not be attributed to the greater number of relatively sick patients in parental households. A similar comparison could not be made for the affective psychotic patients because none of the three patients who went to live with their parents remained in the community for a year.

Method of handling patient

A question which is often asked by the relatives of patients who are about to be discharged is: "How should we behave towards him?" Informants were asked in this inquiry what had been the way in which the members of his household interacted with the patient after his return from hospital. Six principal modes of interaction were identified:- (a) Patient dominates

household (b) Patient is firmly disciplined (c) Patient is indulged (d) Patient is left alone (e) Reciprocal give and take (f) Overt hostility shown towards patient. Analysis showed that these bore a significant relationship both to the patients' chances of remaining in the community (Item 76, table i; P<.001) and to the social adjustment level of the surviving patients (Item 76, table ii; P<.001). By each of these criteria the outcome was best when the patient was left alone, or where reciprocal give and take prevailed between the patient and others in the household - the latter situation could be most readily expected when the patient's mental state was nearly normal. It was interesting to note, however, that the policy of indulging the patient, which was neither exceptionally beneficial nor harmful as regards the criterion of surviving in the community, was associated with an unusually high proportion of patients showing poor social adjustment. Only two out of fourteen patients survived in the face of frank hostility to their presence; both of these achieved a fair level of social adjustment.

WORK RECORD FOLLOWING DISCHARGE

It was found that patients' staying in the community was significantly related to their success in obtaining, and keeping, a job. Of the 92 patients who worked for six months or more,

only three required to be readmitted within the year, whereas of the 96 patients who failed to hold a job for as long as one month, 52 were readmitted. It is appreciated that this comparison is a partial one because patients who relapsed early did not have an opportunity to work for six months: but the relationship is still very strong when patients are rated as having worked for varying proportions of the time which they spent in the community (Item 52h; P<.001).

A study of Tables 4 and 5 shows that for both schizophrenic and affective psychotic patients the prognosis for survival in the community was better (whatever the level of disturbance of the patient's behaviour) if he worked.

TABLE 4

SCHIZOPHRENICS - SUCCESS AND FAILURE
BY LEVEL OF BEHAVIOUR AND EMPLOYMENT

Leval of Behaviour	W o r k		N o W o r k	
	Survival	Relapse	Survival	Relapse
Nearly normal	53	0	5	2
Moderately disturbed	23	7	14	10
Severely disturbed	3	4	8	25

TABLE 5

AFFECTIVE PSYCHOSES - SUCCESS AND FAILURE
BY BEHAVIOUR LEVEL AND EMPLOYMENT

Level of Behaviour	Work		No Work	
	Survival	Relapse	Survival	Relapse
Nearly normal	10	1+	5	0
Moderately disturbed	3	4	0	1
Severely disturbed	2	1	0	3

+Case No. 59, described in text.

Among the patients with affective psychosis there was one who belied the general rule that patients whose behaviour was rated "nearly normal" and who worked for at least one month tended to remain out of hospital. This man (No. 59 in the series) was discharged in 1951 after five years' stay, his second admission for recurrent mania. He had formerly been a postman but following a railway accident in which he had lost one arm he had worked as a Messenger in the civil service up to the day of his admission to hospital. On discharge he experienced great

difficulty in finding a job; soon after doing so he began to suffer from sleeplessness and depression, and returned voluntarily to hospital in order to have further treatment.

Only ten of the patients rated severely disturbed were able to work, but four of these surprisingly held jobs for the greater part of the year. More than half of the moderately disturbed patients found work, and 28 of these patients worked most of the year. This showed that the presence of quite conspicuous signs of mental aberration was not necessarily incompatible with obtaining, and keeping, a simple form of employment.

The association of ability to work and survival in the community was evident in the subgroup of schizophrenic patients (Item 52b, table i; $P<.001$) but in the smaller group of affective psychotics employment was not significantly associated with outcome (Item 52b, table ii). This was probably due to the greater readiness of the wives of affective psychotic patients to tolerate their husbands' remaining unemployed, as has already been noted.

Preparation for employment

Ideally, preparations are made for a patient's future employment before he leaves hospital. In this group of chronic patients such plans had been made for only 47 men, of whom only

seven required to be readmitted within the year, showing that their survival rate was above the average (Item 43c, P<.01).

Type of work obtained

Of those who found work for at least one month 86 men (66 per cent of this group) were employed as unskilled manual labourers and of these 19 relapsed. The 44 men who succeeded in obtaining work of higher status did significantly better than this, only four requiring to be readmitted (Item 52f, P<.05). When the status level of the patients' employment after discharge was compared with that of their last job before admission, it was at once apparent that the mere fact of working was of greater importance than the type of work obtained (Item 52g). Clearly, no simple conclusion can be drawn about the type of work most suitable for ex-patients: this is a matter for individual adjustment. It is interesting to note, however, that all fourteen of the patients whose new job was of a much humbler status than their former one showed a good outcome. These were mostly schizophrenic patients who had made a realistic adjustment to their handicap.

Social outcome of patients suffering from epilepsy

Although the number of epileptics included in this survey was too small to justify detailed analysis, it is of interest to note their experiences in relation to the two major social

variables of work and type of household. Of eighteen epileptics, eleven survived in the community, four of these in a dependent state. If these patients were able to work, their chances of remaining out of hospital improved (Item 52b, table iii; owing to small numbers, the association falls short of the .05 level of significance) in spite of the fact that the occurrence of fits frequently led to their losing their job and being obliged to seek another one.

None of these patients returned to live with their wives. Two had been married but in both cases the wives divorced them during their stay in hospital. One patient obtained work in a hotel and lived in; one stayed in a mental after-care hostel, and two in lodgings. All four of these patients remained out of hospital. On the other hand, of ten patients who went to their parents, five relapsed, and of four who went to other relatives, two relapsed. It was found that the only two epileptic patients who relapsed although they had shown themselves capable of holding a job for more than one month were living with their parents: in both cases they encountered marked hostility and were soon involved in angry scenes. This may have contributed to the aggravation of their condition which led to their being re-admitted. It has to be remembered that these patients differed from other epileptics in that they had also suffered from a psychosis or behaviour disturbance severe enough

to occasion their staying in hospital for more than two years before the present discharge, (for details of outcome see Item 48, table vi).

CHAPTER 7

FACTORS AT WORK IN INDIVIDUAL CASES

The analysis of trends in the outcome of groups of patients can help to identify factors which tend to be important for prognosis, but in each individual case particular combinations of these factors may occur, or idiosyncratic features may appear to be of crucial significance. In order to give a picture of the variety of particular situations which were encountered in the course of this study, a number of examples have been chosen to illustrate a few salient points in the experiences of patients who went to live in each of the five types of household.

PATIENTS LIVING IN HOSTELS

Survival in spite of disability:

Number 36, E.E.F. was 37 years old when discharged after three years' stay in hospital (his first admission) suffering from pfropf schizophrenia. For many years he had been capable only of simple odd jobs. Since discharge he has lived for six years in a succession of men's hostels, drawing National Assistance. The follow-up interview was conducted late one evening in the office of a Salvation Army Hostel in an unsalubrious quarter near Liverpool Street Station. The

informant was the patient's elder brother who had just returned from a long day's work as a window-cleaner. He occupies the next bed to the patient in a large dormitory, sees that he is adequately clothed and fed, and protects him from their sometimes turbulent neighbours - the interview was punctuated by shouts, brawling and the ejection from the premises of two drunken Irishmen, a reminder of how turbulent this environment could be. The patient still has obvious symptoms of his illness, but they are innocuous. He spends his days watching the bustle of activities around the docks and occasionally gets an odd job as a porter or handy-man.

Voluntary return to hospital:

Number 37, H.G. a sixty-year-old gardener who had been in hospital for two years with depression (his fifth admission). During a previous admission his wife had left him. After discharge, he led a very solitary existence, living in a Rowton House. He did not succeed in getting back his old job, but worked instead as a road-sweeper. He disliked this work and missed the amenities and the social life of the hospital. After two months he applied for re-admission as a voluntary patient.

Survival in a supportive environment:

Number 123, D.S. aged 36 on discharge early in 1950 after nine years in hospital, his second admission. A well-educated

youth, he had suffered from simple schizophrenia since the age of 17. He went to stay in a Mental After-care Hostel, from which he found work locally as a hospital orderly, and has kept this job for six years. The warden of the hostel accepts the inconvenience of the patient's working late shifts when necessary. His elderly father and step-mother live in retirement in a small flat. They are well-disposed towards him and welcome his occasional visits but have not made any material contribution towards his success.

Relapse through lack of supportive environment:

Number 273, J.W. aged 56 on discharge in 1953 after a three-year period in hospital with schizophrenia (his fourth admission). His wife left him after his first attack, in 1944. During the last two years of his stay in hospital he was able to resume his old job as carriage-cleaner and attended work regularly. He left hospital to live in a hostel, but within a few weeks it became apparent that his adjustment was too precarious to stand the strain of having to fend for himself in an indifferent world. His behaviour began to deteriorate, and he began to exhibit psychotic symptoms. His attendance at work became irregular, so that he lost his job with the railway and took to selling newspapers, moving from one hostel to another. Eight months after discharge his schizophrenic symptoms and social incompetence

became aggravated so that he required to be re-admitted to another hospital.

PATIENTS LIVING WITH THEIR PARENTS

Disharmony leading to relapse:

Number 7, R.F. aged 34 when discharged home to his parents after two years' treatment for schizophrenia (his third admission). Although his behaviour was only moderately disturbed he was not successful in finding work, and spent most of his time at home, where he became irritable and would fly into a temper with his mother. This was a household in which the husband and wife got on badly. The patient became involved in their quarrels because his father resented his idle presence. It was evident that the father thought that his son was fit only for life in an institution, whereas his mother showed greater readiness to tolerate his deficiencies. After ten months, the father's view prevailed, and the patient returned to hospital.

Success at a low level of adjustment:

Number 22, J.B. was aged 38 when he returned to live with his mother after a two-year admission to hospital (his third admission) for schizophrenia in 1951. Since discharge from the R.A.F. on psychiatric grounds in 1943, he had remained

unemployed. He suffers from asthma, and is mentally somewhat childish and dependent but in no way conspicuously abnormal. His mother supports him and treats him like a child, which he accepts: she attributes all of his disabilities to physical infirmity and by so doing appears to find it easier to explain his state of helplessness.

Successful outcome of an epileptic:

Number 35, W.R.F. aged 35 when he escaped from hospital in 1952 after six years as a certified patient, with epileptic psychosis (his second admission). Before admission he often became involved in fights, and seizures were frequent. He avoided recapture and went to stay with his widowed mother in their old house in a mean street near the Oval cricket ground. Since his return, the last of her other two sons and daughters has married and left home. Patient still has fits once in three weeks, usually at night, he is able to fend for himself soon after recovering from each fit. He has worked uninterruptedly as a labourer since 1952. Both his work record and his general behaviour are much better now than before admission: this may be partly due to his cordial dislike of the hospital and his determination to avoid re-admission. His brothers and sisters are frankly hostile towards him, but his mother welcomes his presence: she spoke appreciatively of the

fact that the neighbours also greet him in a friendly way now, in recognition of his improved behaviour. Although the patient and his mother are both somewhat inarticulate she appreciates his company, and he goes out of his way to do things to help her, such as lighting the fire in the early morning before he goes out to work.

Relapse of an epileptic:

Number 124, W.E.T. aged 29 on discharge from hospital at the end of 1949 after ten years' stay, his second admission for psychosis with epilepsy. In hospital his fits and his behaviour became well-controlled, and a psychiatric social worker found him a job as cinema attendant. Because his parents were unwilling to receive him, a place was obtained for him in a hostel, but he left this almost at once and insisted on returning home. This household was remarkable for the scrupulous cleanliness and polish of its furniture, which was both crowded and expensive: it was remarkable also for a bitterness of the hatred which existed between its members - a real nest of vipers. The patient's mother, who dominated the household, was on very bad terms with her husband, and regarded her son as foolish, depraved and dangerous (in contrast to the favourable reports on his conduct given by the hospital and other agencies). She and the patient soon quarrelled violently.

He lost his job, neglected to take his anticonvulsant drugs, left home and was soon afterwards picked up by the police and re-admitted to mental hospital.

Relapse in spite of mother's efforts:

Number 99, D.H. aged 28 when he was discharged against medical advice after seven years in hospital, his third admission for schizophrenia. His doting mother, who applied for his release, persisted in denying that there was anything wrong with her son, although his behaviour was conspicuously disturbed. After discharge he did no work, lay late in bed and insisted on his mother's waiting on him. She was glad to have him home, but was so indulgent that she tolerated not only his unemployment but also his refusal to draw his National Assistance money. As a result, they soon ran out of fuel and of food, at which patient abused and struck her. To her great regret, the neighbours intervened and caused the patient to be taken away and certified again. This mother lives in the greatest poverty, in a single room in a condemned property. She still deprives herself of necessities in order to visit her son and take him presents.

PATIENTS LIVING WITH THEIR WIVES

Success of a handicapped patient:

Number 141, T.D.M. was aged 49 on discharge after eight

years' treatment, his second admission for general paralysis. As a young man he had been relatively well off, and had been particularly generous towards his wife, who remembers this gratefully. After his illness she returned to her own family who have for several generations lived in caravans, settling in one place in winter and taking their booths and sideshows to a succession of country fairs each summer. In 1950 she decided that the patient was well enough for her to look after him. He was indeed able to do simple tasks in their business. At times children made fun of him, and his wife came to the rescue. He was grateful to be out of hospital and accepted this subordinate role. His competence gradually declined, however, and three years later his wife was glad to let him return to hospital as a voluntary patient.

Failure of a handicapped patient:

Number 199, H.D. was 62 when discharged in 1955 after three years' treatment, his second admission for paraphrenia. Although very deaf, he had worked as a shop assistant until this admission; but after discharge he did not resume work. He began to suffer from insomnia, was restless and complaining by day. His wife found his demands for constant attention increasingly wearisome. Four months after his return, he became excited and broke the neighbours' fence accusing them of

being responsible for his sufferings. The police were called. Although they took no action, the incident aroused much gossip in their street. A few days later, to his wife's relief, the patient returned voluntarily to hospital.

PATIENTS LIVING WITH OTHER RELATIVES

Recovery of a chronic schizophrenic:

Number 243, S.P. was 43 when he was discharged in 1950 after three years' treatment for schizophrenia - his fourth admission to hospital. He went to live with three sisters and a brother, and has remained well, leading a very quiet life but playing a useful part in the fur-making business which they conduct in their home in Whitechapel. His two older sisters, who run the business as well as the household, were concerned at first lest the follow-up interview meant that "the authorities" wanted to bring about the patient's readmission. Reassured on this point, they were able to describe him as a rather withdrawn but innocuous - and indeed helpful - member of their family. In their experience, he presents much less of a problem than his brother, a querulous hypochondriac who has periodic bouts of depression, and whose contribution to their business, although at times valuable, can never be relied on for long.

Rejection of a chronic schizophrenic:

Number 189, W.B. was 47 when he absconded from the hospital where he had been staying for 21 years on his fourth admission for schizophrenia. For some time he had been a voluntary patient. He showed no obvious symptoms but was irresponsible about money. His sister, to whose smart flat he went, had a professional job, as had his married brother. Neither were willing to accept responsibility for the patient, remembering his embarrassing behaviour twenty-five years previously. This patient's behaviour and appearance would have excited no remark in a working-class environment: but in the circles in which his brother and sister lived appeared uncouth and out of place. Much against his will he was persuaded to return to hospital five days later.

Support from a daughter:

Number 152, J.H. was aged 57 when he was discharged in 1950 after five years' treatment for manic-depressive psychosis (his second attack). His wife had left him for another man during this illness but his daughter and step-son offered him a home in their council flat. He was extremely quiet and reserved, but was able to find work as a labourer and also helped his daughter look after her three children. His daughter had shown her regard for her father by visiting him regularly in hospital and was glad to have him in her home.

PATIENTS LIVING IN LODGINGS

Benefit from change of household:

Number 18, E.W. was 60 when discharged in 1954 after six years' treatment, his second admission for paranoid schizophrenia. His breakdown occurred shortly after his wife's death. On discharge he went to live with his married daughter, but the son-in-law made it plain that his presence was not welcome, so he moved very soon into nearby lodgings and obtained light work with less responsible duties than his former job as a civil servant. His daughter has continued to keep in touch with him and to welcome his visits to her home.

Success in spite of severe handicap:

Number 87, E.B. was 40 when discharged in 1951 after seven years' stay in hospital (his first admission for epileptic psychosis). He had suffered from fits since the age of 16. Before admission he had beenmarried but his wife had left him. On discharge he found lodgings in a boarding house for young working men, near New Cross. His landlady was extremely accommodating, sympathizing with the patient because her own brother had had fits: she "knew how to handle him" and would not allow the others to provoke him. He was grateful, and showed this by buying presents for her and her children. He was able

to obtain a succession of labouring jobs, each terminated by the occurrence of a fit while at work. Eighteen months after discharge, however, he began to neglect his anticonvulsant medication. His fits and his conduct became worse, so that he had to be re-admitted temporarily; but he has since been discharged from hospital again and still lives in the community.

Enforced change of social group:

Number 146, W.F. was aged 60 when he absconded from hospital after four years' treatment, his first admission for schizophrenia. Before admission he had led a very peculiar life. Unemployed for 16 years, he was a frequent orator at Hyde Park Corner, raised a family of ten children on National Assistance and ill-treated his wife - for a time scarcely allowing her to leave the house. During his admission to hospital she divorced him. On his return to the community she refused to accept him back but obtained a court order requiring him to contribute towards the upkeep of his family or go to prison. He has changed his name, found work as an unskilled labourer and lives in cheap lodgings in a rough district near Bayswater where his eccentricities of dress and manner pass without remark.

Relapse into prison:

Number 19, W.A. aged 38 when discharged after two years'

treatment, his second admission for a chronic anxiety state. He found lodgings in a boarding house in a working-class district in Croydon. His landlady noticed that he was emotionally unstable and let him confide his worries to her. Among other things she learned that his parents lived in the North of England, that they were unhappily married and that they had never shown much interest in the patient's welfare. He worked as a member of a municipal refuse disposal squad for eight weeks, then lost this job and fell into arrears with his rent. Two weeks later he failed to return to his room. His landlady learned in due course that he had been arrested for indecent assault and sentenced to three months' imprisonment. She has not seen him again.

CHAPTER 8

DISCUSSION

It has sometimes been held as a reproach against psychiatry that even when patients are discharged from hospital they are seldom fully recovered. This contention implicitly contrasts mental disorders with acute recoverable organic illnesses rather than with the whole range of medical conditions; if the latter are used for comparison the reproach becomes less valid. This was shown, for example by Dr. Keay, the first Superintendent of Bangour, the mental hospital for the City of Edinburgh. In his Annual Report for 1913 he claimed a "discharged recovered" rate of 41 per cent of all direct admissions to his hospital and found that this compared not unfavourably with the recovery rate of patients admitted to the Royal Infirmary of Edinburgh.

In more recent times, the new concern for psychiatric treatment "in the community" has renewed interest in the degree to which former mental patients continue to be handicapped by their disorder. Once again, a comparison with other forms of illness has proved valuable in putting this matter in perspective. Ferguson and MacPhail (1954) in their study of the outcome of patients treated for acute medical conditions in four general hospitals in the West of Scotland, found that three months after leaving hospital only 55 per cent of these patients were at work.

Some were elderly, but of those of working age 33 per cent were still unemployed although conditions of full employment prevailed in the community at this time. When reviewed two years later, 22 per cent of these patients were found never to have worked since leaving hospital and 27 per cent to have been readmitted to hospital on one or more occasions.

The present study was not concerned with the entire range of conditions which occasion patients' admission to mental hospitals. It excluded the short-stay patients with relatively favourable prognoses who constitute the great majority of discharges, and concentrated upon the minority of long-stay patients who succeed eventually in returning to the community. Most of these chronic patients still carried some after-effects of their mental illness although in 41 per cent of the total the residual symptoms were sufficiently inconspicuous for their behaviour to be rated as "nearly normal".

In view of the poor prognosis generally attributed to chronic mental illness the outcome of this sample was surprisingly good: two out of three survived in the community for at least a year after discharge, and two out of three of these achieved a fair level of social adjustment.

CLINICAL FEATURES RELATED TO OUTCOME

In reviewing the associations of particular factors (and groups of factors) with differences in outcome, the first point

to make is that for these chronic patients the prognostic indicators are in many respects quite different to those found in previous studies in which all discharges, or patients on their first admission are made the focus of inquiry. For example none of the following items were significantly related to outcome: diagnosis, age on discharge, length of stay in hospital, duration of illness - except that schizophrenic patients under the age of 35, or with less than ten years' stay in hospital tended to show lower levels of social adjustment after discharge, whereas those who were over the age of 55 were more likely to remain in the community no matter how long their stay in hospital had been. For non-schizophrenic patients (but not for the schizophrenics) the prognosis was much better if the patient had not previously been admitted to hospital.

Nevertheless, it was still true that the patients' clinical state (as measured by the imperfect indices described in this study) was a major factor and sometimes the crucial factor in determining the outcome. These patients had in common that they were discharged from hospital (whether on or against medical advice, or by absconding) after a stay of at least two years; but in clinical terms they were a heterogeneous group. They differed in the level of social attainment which they had been able to achieve before admission - from that of married men supporting their families and holding down a responsible job, to

that of young men whose illness had prevented them from even beginning to work so that they remained dependent upon their parents - and these differences reflected at least in part the severity of the illnesses from which they had suffered: they were significantly related to the measures of outcome.

Indications of the patients' clinical condition at the time of discharge were obtained from hospital records and from a rating of disturbance of behaviour exhibited on their return to living in the community. These ratings were necessarily crude and imperfect, but they were very significantly related to outcome. It follows therefore that in any discussion of the influence of environmental factors upon the patients' future careers one must examine the possibility that observed differences in outcome might be due to the accumulation of patients with good or bad clinical ratings in one of the types of environment under review.

An attempt has been made to control for this source of bias in analysing the social findings in the present study. Two major social factors have passed the test and can be seen to have contributed to a significant degree towards the likelihood of the chronic patient's surviving in the community. These were, his success in finding and keeping a job, and the type of household to which he went on discharge from hospital.

EMPLOYMENT AND OUTCOME

The former finding is not surprising. It is already the accepted practice of hospital psychiatrists and psychiatric social workers to urge (and to assist) patients to resume work as soon as possible after leaving hospital. This study showed that the presence of residual symptoms of psychosis did not prevent many of the "moderately disturbed" patients from working during the greater part of the year following discharge: and when they did so their likelihood of remaining out of hospital was greatly enhanced. In comparatively few of these cases was a job actually arranged before the patients left hospital, but where this had been done their outcome was significantly better. This confirmed the finding of Cohen (1955) that American ex-service psychotic patients were much less likely to relapse after discharge from hospital if a job placement had been effected before they were discharged. In Cohen's study, as in the present one, the presence of residual symptoms of psychosis did not prevent patients from obtaining work.

The importance of occupational therapy as a preventive of deterioration in long-stay patients has long been recognised, and is still exemplified in practice both in Europe (Carstairs, Clark and O'Connor, 1955) and in our own country (Bickford, 1954). Some psychiatrists have emphasised its use in order to prevent

patients from relapsing into the chronic state, and have advocated an active policy of early discharge, whether or not the patient had fully recovered (Bleuler, 1905; Maier, 1928). Others, especially in recent years, have used work as a means of keeping the patient in touch with the everyday world, again with the intention of discharging him to the community at the earliest opportunity (Sivadon, 1952; Peffer, 1955). The long-stay patients have not always benefited from these activities as much as have the others, with certain notable exceptions: for example, in a Michigan State Hospital Campbell (1945) was able to take advantage of the acute labour shortage of the war years to send many chronic patients out to do paid agricultural work, while in Scotland Miller (1957) and Sherret (1958) have found useful employment for their patients both in agriculture and in local industry. In both instances, a proportion of the patients so employed have succeeded in leaving the hospital and maintaining themselves in the community; but in the Scottish example other treatment factors were at work besides the matter of employment. In a series of studies which are still in progress, Dr. Wing of the M.R.C. Social Psychiatry Research Unit has shown that chronic schizophrenic patients drawn from the long-stay wards of a large mental hospital respond to a remarkable degree to the experience of attending an Industrial Rehabilitation Unit where they associate with physically

handicapped patients (Wing, 1958).

Many reports have testified to the importance of employment in preventing psychiatric deterioration of patients living in the community. One (Stevenson and Fisher, 1954) described how a psychiatrist and a psychiatric social worker, by concentrating their attention upon patients' employment problems rather than upon their psychopathology, were able to rehabilitate 20 out of 25 previously dependent patients. A British study of chronically unemployed men referred from a Public Assistance Committee for psychiatric advice led its author to the conclusion that most of the psychiatric syndromes which these men presented would be likely to improve if they succeeded in finding employment (Lewis, 1935). At that time, the prevailing economic depression made it difficult for them to do so. When a similar study was carried out in post-war years, the chief obstacle hindering the employment of a group of psychiatrically disabled men was found to lie in their defects of personality (Markowe, Tonge and Barber, 1955). These defects were deepseated, and could not readily be overcome; but that they are not wholly intractable has been demonstrated by examples of prolonged and pertinacious psychiatric work (Heimler, 1955; Power, 1956). The importance of readjustment at a viable level of functioning was expressed in one of the reports of the Columbia Greystones psychosurgery project in these terms:

"The willingness of the psychiatric patient and of his family to readjust to a new and less efficient level of activity often spells the difference between durability and collapse in the discharge situation" (Mettler, Crandell, Wittenborn et al, 1954). In the present study chronic schizophrenics who resigned themselves to a lowered occupational status tended to do well.

TYPE OF HOUSEHOLD AND OUTCOME

Psychiatrists have long recognised that the social environment to which a patient goes on leaving hospital can have a considerable influence on his subsequent history. Sometimes, however, it has been tacitly assumed that psychiatric patients, like the physically handicapped, will be most likely to succeed when they enjoy close personal support - such as their parents or spouses can be expected to provide. Because of this assumption, many long-stay patients have been kept in hospital after the severity of their illness has abated, on the grounds that they had no home, or no close relatives to whose care they could be discharged.

The present study suggests that not all long-stay patients will benefit from being discharged to their homes. Those who went to lodgings or to "other kin" were less likely to relapse, and showed a higher level of functioning at the end of the year than did those who returned to their parents or their wives; and this difference could not be accounted for by differences in

the clinical state of patients in these types of household. This finding confirms the recommendations of a number of clinical authorities. For example, the writers of a recent British textbook of psychiatry, discussing the supportive treatment of chronic schizophrenics whose illness has been arrested, state that these patients "are often at their best when they live among ordinary people ..... their own home is often unsuitable" (Mayer-Gross, Slater and Roth, 1954). Rennie (1956) put it very bluntly: "Common-sense would tell us that no patient can be returned to the exact situation prevailing prior to his illness without serious danger of repetition of the illness". His colleague at the New York Hospital has expressed himself more guardedly on similar lines: "A careful analysis of the home environment will permit the physician to decide whether the patient can be discharged to his previous living conditions, whether these can be modified if necessary or whether a more neutral and more favourable place can be found." (Diethelm, 1955). This writer goes on to indicate the advantages, for certain types of chronic patient, of placement in family care - advantages which have been described in European practice by Wing (1957) and in America by Crutcher (1944).

In considering the suitability of the social group to which a patient is discharged, the patient's clinical features must

clearly be taken into account as well as the characteristics of his future environment. The present study shows that chronic patients suffering from schizophrenia differ quite sharply from those with affective psychoses in their outcome in different types of household. Schizophrenics were most likely to relapse if they returned to a marital setting, whereas all eleven affective psychotics who returned to their wives stayed out of hospital. Schizophrenics fared best when they stayed with less intimate relatives or with landladies; in the same circumstances a high proportion of affective psychotics relapsed. The wives of affective psychotics were willing in many cases to tolerate their husband's remaining unemployed: the wives of schizophrenics did not.

The patients' chances of surviving in the community depended in large part on their degree of disturbance of behaviour - a measure which did not differentiate the schizophrenics from the affective psychotics. Their outcome was associated also with the attitude shown towards their presence by the key person in their household. Here the evidence suggested that the presence of a patient handicapped by chronic schizophrenia was not easily tolerated in intimate family groups: but there were several exceptions to this rule. In some cases a schizophrenic patient survived by accepting a dependent, childlike role; in others, by insulating himself from close

personal contacts, living like a stranger (or, as one informant put it, "like a ghost") in the house.

Schizophrenic patients appeared to have greater difficulty than non-schizophrenics not only in adapting themselves to family life, but also in accepting the limitations imposed upon them by their illness. Some, particularly among the older men with a long history of illness, resigned themselves to working at simple manual tasks, and did well. A number of the younger schizophrenics clung to unrealistic occupational aspirations, while in fact remaining at home unemployed, in an unwilling state of dependence on their relatives.

Research workers engaged in a series of social follow-up studies of psychotic patients in Boston have emphasised the importance of the social pressures applied to the patient by the other members of his household (Freeman and Simmons, 1958). In their study functional psychotic men patients discharged from hospital to live with their mothers or their wives showed the same rate of relapse from each type of household, but those who survived in their parents' home were more likely to be unemployed and to be leading a very restricted social life: this was attributed to the higher expectations and demands expressed by the wives, to which the patients had to conform if their presence were to be tolerated.

The Boston study differs from the present one in two

important respects. Firstly, it dealt with a diagnostically mixed group of non-organic functional psychotics, of whom the majority were schizophrenics. The relationship of types of household and outcome was ascertained for the whole group: but the present study suggests that this calculation may have obscured quite opposite trends in the schizophrenic and non-schizophrenic patients. In the present study it was found that wives (but not parents) were tolerant of low performance levels shown by returned affective psychotics; whereas parents (but not wives) were more likely to tolerate low levels of functioning by schizophrenics. When patients of all diagnostic groups were considered, those who survived in marital settings were found to show slightly higher levels of social adjustment than those living with their parents, but this difference was not significant (Item 70, table iii; $P > .05$).

The Boston study also differed in that it dealt for the most part with early cases, whereas the present inquiry was concerned with chronic illness. This may well have influenced the attitude of the patients' relatives towards them. That such attitudes are an important factor in the patients' chances of survival in the community has been indicated by recent investigations in North America (Cumming and Cumming, 1957; Clausen and Yarrow, 1955; Schwartz, 1957). These studies suggest that a mental patient's relatives tend to react to his first illness by denying or minimising its psychiatric aspects.

With every relapse, however, the likelihood increases that they will completely change their attitude, coming to regard the patient as incurably insane. It is possible that different attitudes might be found in contemporary British society: certainly it was remarkable how many relatives of these chronic patients were prepared to welcome their return even when they were manifestly not fully recovered. The much more favourable outcome of the patients in the present study as compared with those in two previous reports concerning chronic psychotics (Smith, 1946; Stringham, 1952) also suggests that the present climate of opinion in Britain is propitious for the reception of the mentally handicapped in the community. It is necessary, however, to draw attention to factors which set limits to public tolerance of these patients.

SOCIAL LIABILITY OF THE RETURNED PATIENT

As has been shown above, 38 (11 per cent) of these 229 patients presented a serious liability to other members of their household, and another 64 (28 per cent) caused an appreciable degree of inconvenience to their fellows. This is an aspect of "community care" for mental patients which has perhaps received insufficient attention in recent years. More than ten years ago three American psychiatrists pointed out that one consequence of active programmes of shock therapy followed by early discharge

was that patients' relatives were being required to play a greater part than before in the treatment of these illnesses - a part which they could play successfully only if they received much more medical and social guidance than had hitherto been the case (Feldman, Susselman and Barrera, 1947). Since that time, the practice of early discharge has greatly increased, but the provision of systematic after-care as the present study shows, is still totally inadequate.

IMPLICATIONS FOR CLINICAL PRACTICE

On the purely practical level, this study indicated a conspicuous gap in the present psychiatric services: the insufficiency of provision for after-care. Few of these patients had any further contact with out-patient or psychiatric social work help after leaving hospital. The number of out-patient clinics within easy reach of patients' homes is steadily increasing as psychiatry is coming to be accepted as one of the specialties which should be represented in every general hospital. On the other hand, there is a serious shortage of psychiatric social workers which will be aggravated rather than lessened in the next few years owing to the greater demands which are likely to be made upon their services.

There is undoubtedly a trend away from institutional care and in favour of community care for the mentally ill. As Feldman,

Susselman and Barrera were among the first to point out, this imposes new responsibilities upon the patients' relatives and their general practitioners; and this is especially the case in the numerous instances where a psychiatric patient is discharged from hospital while still on a maintenance dose of a tranquillizing drug. Should he neglect to take his medicine, his psychosis may again become evident in his disturbed behaviour. Under these circumstances, relatives, doctors, district nurses and health visitors are naturally concerned to know what are the most favourable conditions of life for the ex-patient, and how these patients should be handled. The lessons of the present inquiry are that efforts to help the patients to find work - preferably set in motion before they leave hospital - will be rewarded by a more favourable outcome; and that schizophrenic and non-schizophrenic patients respond to different types of social interaction. The former appear to profit from intensive affectional as well as material support; the schizophrenics, on the other hand, certainly need support but of a different kind. As Heimler (1955) and Power (1956) have shown, they must be given help which is constantly renewed even when they appear to reject it, and which is offered in a friendly but impersonal way.

Schizophrenic patients, like children, tend to react against a direct personal approach, especially when this is charged with emotion: this is reflected in their greater success in impersonal

than in intimate household groups. Schizophrenics also, however, respond to the expectations of those with whom they come into daily contact. In a "refractory ward", where repressive measures are the rule, schizophrenic patients respond with outbursts of violent and sometimes degraded behaviour, whereas under a permissive regime the same patients will behave much more quietly: this is the justification of the open-door policy in mental hospitals. In the community, also, the level of patients' behaviour will be favourably influenced if their companions do not interfere with them, but show a tacit expectation that they will conform to the norms of ordinary life. This will not always be easy: it will be particularly difficult when the patient's illness has led to violent or antisocial behaviour in the past. Under such circumstances, and in all cases where the patient and his (perhaps well-meaning) relatives "get on each others nerves", a placement away from home is to be recommended.

NEED FOR EVALUATION OF PATIENTS' SOCIAL OUTCOME

In so far as the movement for increasing community care succeeds in preventing prolonged seclusion of chronic patients in mental hospitals, its effects will certainly be beneficial to the patient. The just evaluation of such changes in treatment policy is, however, a complex undertaking - just how complex,

has been shown by the report of a recent conference devoted to this topic (Milbank Memorial Fund, 1958). The patient's level of social functioning and his freedom from distressing symptoms must be assessed; but an inquiry must also be made into whether his rehabilitation has been obtained at the expense of others in his social group. The present survey noted only the most conspicuous instances of social liability. A more prolonged and intimate inquiry would be necessary in order to ascertain the subtler forms of disturbance which the presence of a mentally unbalanced patient can cause in a family. Such an investigation, on a series of 19 leucotomised women patients has been reported by an experienced psychiatric social worker who came to the conclusion that: "although most of the patients themselves were relieved by the operation, the changes in their personalities had a profound effect on the rest of the family" (Lane, 1956).

In recent years clinical psychiatrists have come to recognise the necessity of conducting carefully designed therapeutic trials in order to assess the efficacy of the many new drugs which have been alleged to relieve psychiatric illness. Social psychiatrists will have to try to be no less rigorous in testing the claims of new social and administrative measures in the treatment of the mentally ill. Their task will not be easy, because social experiments are inevitably complex; the variables are many, and interact one with another. It is still possible, however, to

learn from a systematic analysis of patients' (and their relatives') response to new socio-medical situations: and it would be desirable, in the future, to plan controlled studies in which the consequences of particular medical and social interventions could be ascertained. There is no lack of topics which could profitably be investigated: for example, the growing practice of treating psychotic patients on an ambulatory basis with the help of drugs suggests an inquiry into the extent to which the patient's response to drug treatment alters the social situation in the household in which he lives; the existence of markedly contrasting policies for the management of psychiatric patients in different cities provides an opportunity for the measurement of the consequences, for patient and relatives, of these alternative provisions; and it would be desirable to measure the consequences, for the future mental health of young children, of a psychotic parent's being treated in his home. Towards these more complex inquiries, the present survey represents a very modest first step.

SUMMARY

A follow-up study was made of 240 male patients discharged from seven metropolitan mental hospitals after a stay of more than two years. Information was sought about the patients' outcome in terms of readmission to hospital and in terms of his behaviour and work record during the twelve months following discharge. A schedule of inquiry covering 160 items of information was completed for 229 (95 per cent) of the patients. The patients' outcome was assessed in terms of two criteria: (1) survival in the community for at least one year, and for those who so survived: (2) a rating of their level of social adjustment. Sixty-eight per cent of the patients remained out of hospital for at least one year, two-thirds of these attaining full or partial social adjustment.

Among factors associated with outcome, the patients' degree of freedom from the grosser signs of mental illness was of first importance. Having allowed for this, two social factors were found to be significantly related to outcome: (1) If a patient succeeded in finding employment, he was less likely to relapse; (2) Significant differences in relapse rates were found for schizophrenic and non-schizophrenic patients respectively in different types of household. Schizophrenics fared worst when they went to live with their parents or wives; non-schizophrenics

fared worst when going to lodgings or to other relatives. The findings suggest that schizophrenics benefit from surroundings in which they are not exposed to intimate personal relationships but are expected to fend for themselves. In this respect they differ from patients suffering from other types of chronic disability.

The follow-up study revealed that a minority of these patients were surviving in the community at the expense of causing inconvenience, and in some cases suffering, to other persons in their households. This is a consideration which has to be borne in mind when considering contemporary proposals for increasing "community care" for mental illness: the evaluation of such programmes requires that a measure of their cost to the community in terms of hardship should be weighed against their advantages for the individual patients.

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MEDICAL RESEARCH COUNCIL

Social Psychiatry Research Unit
Maudsley Hospital, London, S.E.5.

CHRONIC PSYCHOTICS' FOLLOW-UP SCHEDULE

Hollerith Columns

1/
2/
1. SERIAL NO. OF CASE: _____ 3/

2. INTERVIEWER: X. B 4/
Y. C
O. T

3. PATIENT: _____

4. HOSPITAL: 4/
1. Banstead
2. Bexley
3. Cane Hill
4. Claybury
5. Springfield
6. Warlingham
7. Friern Barnet

5. HOSPITAL NUMBER: _____

6. STATUS AT TIME OF INTERVIEW:
In hospital
Dead
Discharged/unemployed
Discharged/ employed

7. DURATION OF DISCHARGE PERIOD:

(a) 5/
9. Less than 12 months - "failure"
7. 12 to 18 months } "success"
6. Over 18 months }

(b) 5/
5. 1-2 years
4. 2-3 years
3. 3-4 years
2. 4-5 years
1. 5-6 years
0. Over 6 years
Y. Not known
8. Failure in year of enquiry

8. DATE OF INTERVIEW: _____

9. PERSONS INTERVIEWED: Primary informant: _____

Other informants: _____

X. Primary informant in patient's post hospital group (include patient if living alone). 6/

Y. Primary informant outside patient's post hospital group (include patient if not living alone).

10. DURATION OF KEY ADMISSION: a) From _____
to _____

b) 2. 2 years 6/
3. 3 years
4. 4 years
5. 5 years
6. 6 years
7. 7 years
8. 8 years
9. 9 years
0. 10-14 years
1. 15 years and over

11. DATE OF BIRTH: _____

12. AGE ON DISCHARGE: 1. 20-24 7/
2. 25-29
3. 30-34
4. 35-39
5. 40-44
6. 45-49
7. 50-54
8. 55-59
9. 60-65

13. DIAGNOSIS: Y. Epilepsy 8/
0. M.D.
1. Schizophrenia
2. Depression
3. Involutional
4. Mania
5. Organic
6. Paranoid state
7. Psychoneurosis
8. Psychopathy
9. Other

14. NUMBER OF PREVIOUS ADMISSIONS:	0.	None	9/
	1.	One	
	2.	Two	
	3.	Three	
	4.	Four	
	5.	Five	
	6.	Six and over	
15. TOTAL DURATION OF ALL ADMISSIONS:	X.	2-3 years	10/
	Y.	3-4 years	
	0.	4-5 years	
	1.	5-6 years	
	2.	6-7 years	
	3.	7-8 years	
	4.	8-9 years	
	5.	9-10 years	
	6.	10-11 years	
	7.	11-15 years	
	8.	15 years and over	
16. STATUS ON KEY ADMISSION:	X.	Certified	11/
	Y.	Voluntary	
	0.	Temporary	
17. STATUS ON KEY DISCHARGE:	9.	Certified	11/
	8.	Voluntary	
	7.	Temporary	
18. CHANGE IN STATUS DURING KEY ADMISSION:	6.	Down grading	11/
	5.	Up grading	
	4.	No change, Cert.	
	3.	No change, Vol.	
19. TREATMENT DURING KEY ADMISSION:	X.	Leucotomy	12/
	Y.	Ataraxic	
20. WHETHER LEUCOTOMISED AT ANY TIME:	7.	Yes	12/
	8.	No	
	9.	Not known	
21a. METHOD OF DISCHARGE:	0.	Against medical advice	13/
	1.	On medical advice	
	2.	Not known	
21b. ESCAPE:	X.	Escape	13/
		Not escape	
22. CATEGORY ON DISCHARGE:	4.	Recovered	13/
	5.	Relieved	
	6.	Not improved	
	7.	Not known	

1. Prior to the key admission

23. YEARS ELAPSED "SINCE HIS TROUBLE BEGAN":

0. Less than 6 months
1. 6-12 months
2. 1-2 years
3. 2-3 years
4. 3-4 years
5. 4-5 years
6. 5-10 years
7. 10-15 years
8. Over 15 years
9. Not known

14/

Remarks:_____

_____

24. COMPOSITION OF HOUSEHOLD JUST BEFORE ADMISSION:
(List domestic groups separately).

a) Initial or first name	relation to patient	approx. age	sex	Financial status
Patient_____	_____	_____	___	_____
_____	_____	_____	___	_____
_____	_____	_____	___	_____
_____	_____	_____	___	_____
_____	_____	_____	___	_____
_____	_____	_____	___	_____
_____	_____	_____	___	_____

b) Number of persons: (excluding patient).

X. 0
1. 1
2. 2
3. 3
4. 4
5. 5
6. 6
7. 7
8. 8
9. 9
0. 10 or over
Y. Not known

15/

25. PATIENTS FORMAL STATUS IN DOMESTIC GROUP: 16/
1. Head
2. Subordinate
3. Peer
4. Not applicable
5. Not known
0. Dependent
X. Independent-alone

26. DISCREPANCY OF FORMAL WITH ACTUAL FINANCIAL STATUS: 16/
6. Yes
7. No
8. Not known
9. Not applicable

27. MARITAL STATE (just before admission): 17/
1. Single
2. Married
3. Widower
4. Separated
5. Divorced
6. Cohabitation
7. Not known

28. DATE OF MARRIAGE: _____

29. YEARS MARRIED BEFORE ADMISSION: 18/
1. 1 year
2. 2-3 years
3. 3-4 years
4. 4-5 years
5. 5-10 years
6. 10 years and over
7. Not known
8. Not applicable

30. DESCRIPTION OF PATIENT'S DOMESTIC GROUP: (just before admission) 19/
X. Parental
Y. Marital / with dependent children
0. Marital / without dependent children
1. Sibling
2. Institution or hostel
3. Lodgings
4. Friends
5. Kin group (other than above)
6. Alone
7. Not known
8. Army
9. No fixed abode

31. NUMBER OF PERSONS FINANCIALLY DEPENDENT ON PATIENT: (just before admission) 20/

0. None
1. One
2. Two
3. Three
4. Four
5. Five
6. Six
7. Seven and over
8. Not known

32. LAST OCCUPATION BEFORE ADMISSION:

a) Description _____

_____

_____

_____

b) Occupational rating: 21/

1. Professional / high administrative
2. Managerial / executive
3. Inspectorial, supervisory (higher grade)
4. Inspectorial, supervisory (lower grade)
5. Routine non-manual
6. Skilled manual
7. Manual semi-skilled
8. Manual routine
0. Never employed
X. Not known

33. DURATION OF LAST OCCUPATION BEFORE ADMISSION: 22/

X. Less than 3 months
Y. 3-6 months
0. 6-12 months
1. 1-2 years
2. 2-3 years
3. 3-4 years
4. 4-5 years
5. 5 years and over
6. Not known
7. Not applicable

34. MAJOR CHANGES IN PATIENT'S SOCIAL CIRCUMSTANCES SINCE THE ONSET OF ILLNESS:

a) Marital state: _____

_____

_____

b) Residence: _____
_____
_____

c) Household composition: _____
_____
_____

d) Any change in domestic group affiliation by patient: _____
_____
_____

e) Patient's earnings:

X. Rise
Y. Same
0. Fall
1. Not known
2. Not applicable

23/

f) Peak occupation reached in total work history:

X. Professional / high administrative
Y. Managerial / executive
0. Inspectorial, supervisory (higher grade)
1. Inspectorial, supervisory (lower grade)
2. Routine non-manual
3. Skilled manual
4. Manual semi-skilled
5. Manual routine
6. Never employed
7. Not known

24/

g) Change in occupational level: (compare ratings 34f with 32b).

0. Same
1. Drop 1 class
2. Drop 2 classes
3. Drop 3 classes
4. Drop 4 classes
5. Drop 5 classes
6. Drop 6 classes
7. Drop 7 classes
8. Not applicable
9. Not known

25/

35. RATING OF HIGHEST LEVEL OF SOCIAL RESPONSIBILITY REACHED:

1. 1 Supporting, M. and deps.
2. 2 Sup., M. and 1 dep. or S. and deps.
3. 3 Sup., S., 1 dep.
4. 4 Self-sup., S. non-kin group
5. 5 Self-sup., S., own kin group
6. 6 Self-sup., M.
7. 7 Dependent, S.
8. 8 Dep., M.
9. Not known

26/

36. RATING OF LEVEL OF SOCIAL RESPONSIBILITY JUST BEFORE ADMITTANCE: 27/

1. 1 Supporting, M. and deps.
2. 2 Sup., M. and 1 dep. or S. and deps.
3. 3 Sup., S. 1 dep.
4. 4 Self-sup., S. non-kin group
5. 5 Self-sup., S. own kin group
6. 6 Self-sup., M.
7. 7 Dependent, S.
8. 8 Dep., M.
9. Not known

37. RATING OF ANY CHANGE IN SOCIAL RESPONSIBILITIES: 28/

0. Same
1. Drop 1 point
2. Drop 2 points
3. Drop 3 points
4. Drop 4 points
5. Drop 5 points
6. Drop 6 points
7. Drop 7 points
8. Not known

38. CIRCUMSTANCE OF REFERRAL TO HOSPITAL:

a) Description: _____
_____
_____
_____

c) Onset of illness: 30/

X. Chronic
Y. Acute
0. Not known

d) Was the patient physically dangerous to: 30/

1. Self
2. Others
3. Neither
4. Not known
9. Both

e) Neighbour's complaints or criticisms about patient: 30/

5. Many
6. Some
7. None
8. Not known
Not applicable (leave blank)

f) Agencies concerned: 31/

X. Police
Y. G.P.
1. Not known
2. Other medical channels

38. CIRCUMSTANCE OF REFERRAL TO HOSPITAL (contd.)

g) Index of social disturbance: 31/

3. Severe disturbance, neighbours involved
4. Severe disturbance, neighbours not involved
5. Severe disturbance, (social agencies only)
6. No physical violence, neighbours involved
7. No physical violence, household only involved
8. No physical violence, social agencies only involved
9. Information insufficient for rating.

II. Period of Stay in Hospital

39. CHANGES IN PRE-ADMISSION HOUSEHOLD:

a) Any change in type or place of residence:
Yes
No
If yes, Describe:_____
_____

b) Any changes in household composition:
Yes
No
If yes, describe:_____
_____

c) Any major changes in social roles of household members:
Yes
No
If yes, specify:_____
_____

d) Were changes such as to occlude the patient: 33/

5. Not applicable
6. Still open
7. Potentially open
8. Not open
9. Not known

Description:_____
_____
_____
_____

40. FINANCIAL CIRCUMSTANCES OF DOMESTIC GROUP DURING PATIENT'S STAY IN HOSPITAL: DELETED

41. SOCIAL CONSEQUENCES OF PATIENT BEING IN HOSPITAL:

a) Did kin outside the household, friends or neighbours make unkind or hostile comments about the patient being in hospital: 35/

5. 2 or more persons
6. 1 person
7. None
8. Not known
9. Not applicable

Remarks:_____

b) If yes, how did the informant react: 36/

X. Sharing in hostility
Y. Neutral
0. Defending patient
1. Not applicable
2. Not known

Remarks:_____

c) Were kin, friends or neighbours positively helpful: 36/

5. 3 or more persons
6. 1 person only
7. None
8. Not known
9. Not applicable

Remarks:_____

d) Were members of the household embarrassed by other peoples' comments or by the fact of patient's remaining in hospital: 37/

X. Yes
Y. No
0. Not known
1. Not applicable

If yes, describe:_____

41. SOCIAL CONSEQUENCES OF PATIENT BEING IN HOSPITAL:

e) Did any person strongly urge the desirability of the patient's remaining in hospital:

6. Yes
7. No
8. Not known
9. Not applicable

If yes, describe:_____ 37/

f) Informant's opinion of the hospital:

X. Strongly repelled
Y. Disliked
0. Neutral
1. Favourable
2. Not known
3. Not applicable

Quote statements:_____ 38/

g) Patient's opinion of the hospital:

5. Strongly repelled
6. Disliked
7. Neutral
8. Favourable
9. Not known

Remarks:_____ 38/

h) Key person's attitude towards the idea of the patient's discharge:

5. Eager
6. Accepting but doubtful
7. Hostile
8. Not known
9. Not applicable

Remarks:_____ 39/

i) Did anyone accept responsibility for patient's welfare at discharge:

X. Yes
Y. No
0. Not known 39/

42. CONTACTS OF PATIENT WITH EXTRA-HOSPITAL WORLD DURING YEAR BEFORE DISCHARGE:

a) Patient on:
- X. Closed ward
- W. Ground parole
- 0. Town parole
- 1. Not known

40/

b) Visits to patient: by_____

- 3. Regularly
- 4. Infrequently
- 5. Never
- 6. Not known
- 7. Not applicable

40/

c) Leaves during year before discharge:
- X. No leaves
- Y. 1-2 leaves
- 0. 3-5 leaves
- 1. 6-10 leaves
- 2. 10-20 leaves
- 3. 21 and over
- 4. Not known

41/

d) Trial visits:
- 5. Arranged

43. PREPARATION OF HOUSEHOLD FOR PATIENT'S DISCHARGE:

a) Was notice of the patient's return given in advance:
- 6. Yes
- 7. No
- 8. Not known
- 9. Not applicable

41/

b) Did pressure for patient's return come from:
- X. Household
- Y. Hospital
- 0. Patient
- 1. Not known

42/

c) Did the patient have a job arranged before the date of his discharge:
- 2. Yes
- 3. No
- 4. Not known

42/

43. PREPARATION OF HOUSEHOLD FOR PATIENT'S DISCHARGE: (Contd.)

d) Any visits from P.S.W. etc., to household before discharge:
6. Yes
7. No
8. Not applicable
9. Not known
42/

III. Period of Discharge

44. COMPOSITION OF HOUSEHOLD TO WHICH PATIENT WENT: (List domestic group separately).

a) Initial or first name	relation to patient	approx. age	sex	Financial status
Patient				

b) Numbers of persons: (excluding patient)
X. 0
1. 1
2. 2
3. 3
4. 4
5. 5
6. 6
7. 7
8. 8
9. 9
0. 10 and over
Y. Not known
43/

c) Number of new persons:
X. None
Y. One
0. Two
1. Three
2. Four
3. Five or more
4. Not known
44/

d) Members of own generation:
6. Yes
7. No
8. Not applicable
9. Not known
44/

44. COMPOSITION OF HOUSEHOLD TO WHICH PATIENT WENT:

e) Age of key person:

X. Up to 30
Y. 31-40
0. 41-50
1. 51-60
2. 61-70
3. 71 or over
4. Not applicable and not known

45/

f) Sex ratio of domestic group:

5. More women
6. Equal
7. Less women
8. Not applicable
9. Not known

45/

45. PATIENT'S FORMAL STATUS IN DOMESTIC GROUP:

X. Head
Y. Subordinate member
0. Peer
1. Not applicable
2. Independent - alone

46/

46. DISCREPANCY OF FORMAL STATUS WITH ACTUAL FINANCIAL STATUS:

6. Yes
7. No
8. Not known
9. Not applicable

46/

47. MARITAL STATE ON DISCHARGE:

X. Single
Y. Married / dependent children
0. Married / no dependent children
1. Widower
2. Separated
3. Divorced / Matrimonial Causes Act, during key admission.
4. Divorced / other
5. Cohabitation

47/

48. DESCRIPTION OF PATIENT'S DOMESTIC GROUP AT DISCHARGE:

X. Parental
Y. Marital / dependent children
0. Marital / no dependent children
1. Sibling
2. Institution or hostel - non supportive
3. Lodgings
4. Friends
5. Kin group (other than above)
6. Alone
7. Not known
8. No fixed abode
9. Institution or hostel - supportive

48/

48. DESCRIPTION OF PATIENT'S DOMESTIC GROUP AT DISCHARGE:

b) Number of persons financially dependent on patient:

X. 0
Y. 1
0. 2
1. 3
2. 4
3. 5
4. 6
5. 7 and over

49/

49. CHANGES IN DOMESTIC GROUP:

a) Domestic group:

7. Same
7. Different
9. Not known

49/

b) Type of domestic group:

X. Same
Y. Different
0. Not known

50/

50. RATING OF LEVEL OF SOCIAL RESPONSIBILITY: (1 month after discharge)

1. 1 Supporting, M & deps.
2. 2 Sup., M and 1 dep or S. and deps.
3. 3 Sup., S. 1 dep.
4. 4 Self-sup, S. non-kin group
5. 5 Self-sup. S. own kin group
6. 6 Self-sup., M.
7. 7 Dependent, S.
8. 8 Dependent, M.

50/

51. RATING OF CHANGE OF LEVEL OF SOCIAL RESPONSIBILITY: (Compare 50 with 36)

X. Rise 4 points or over
Y. Rise 3 points
0. Rise 2 points
1. Rise 1 point
2. Same
3. Fall 1 point
4. Fall 2 points
5. Fall 3 points
6. Fall 4 points
7. Fall 5 points
8. Fall 6 points
9. Fall 7 points

51/

52. OCCUPATION STATUS DURING YEAR AFTER DISCHARGE:

a) How soon after discharge did patient begin work: 52/

X. Never
Y. Immediately
0. Less than 1 month after
1. 1-3 months after
2. 4-6 months after
3. More than 6 months after
4. Not known

b) Description of work history: 52/

6. No jobs
7. Part-time work
8. Full-time work
9. Not known

c) Amount of time spent at work: 53/

X. 6-12 months
Y. 3-6 months
0. 1-3 months
1. Less than 1 month (include 'never')
2. Not known

d) Method of obtaining jobs: 53/

3. P.S.W.
4. Family contact
5. Own initiative
6. Labour exchange
7. Former employer
8. Not known
9. Not applicable.

e) Any difficulties in finding and keeping jobs:

_____
_____
_____
_____

f) Rating of job at end of year (or job last held during year): 54/

1. Professional / high administrative
2. Managerial / executive
3. Inspectorial, supervisory (high grade)
4. Inspectorial, supervisory (lower grade)
5. Routine non-manual
6. Skilled manual
7. Manual semi-skilled
8. Manual routine
0. Never employed
X. Not known

52. OCCUPATION STATUS DURING YEAR AFTER DISCHARGE: (Contd.)

g) Job at end of first year of discharge (or last job held) as compared with last job before admission in terms of Hall-Jones scale: (Compare 52f and 32b.)	X. Much better (2 classes and over) Y. Better 0. Same 1. Worse 2. Much worse (2 classes and over) 3. Not known 4. Not applicable		55/
h) Proportion of discharge period (up to end of first year) spent at work:	6. Over 50% 7. Under 50% 8. No work 9. Not known		55/

53. DESCRIPTION OF PLACE OF RESIDENCE IN THE FIRST YEAR AFTER DISCHARGE:

a) Describe: _____
_____
_____
_____
_____

B) Any change of residence:	X. Same premises as before admission Y. Different premises	56/
c) Type of residence in terms of physical separation:	1. Physically separate 2. Some unavoidable interaction beyond the household 3. Much unavoidable interaction beyond the household 4. Not known 5. Not applicable	56/
d) Overcrowding: "Did you have enough room when the patient came home?"	6. Yes 7. No 8. Not applicable 9. Not known	56/

e) Form of tenancy:
X. Own house
Y. Statutory tenant
0. Furnished rooms
1. Institution
2. No fixed abode
57/

f) Interviewer's rating of economic level of domestic group:
5. Not known
6. Satisfactory
7. Difficult
8. Severe difficulty
9. Not applicable
57/

g) Patient's homecoming made financial situation of domestic group:
9. Better off
8. No change
7. Slightly worse
6. Much worse
5. Not applicable
4. Not known
58/

h) Post hospital job compared with highest level of job reached:
0. Same or better
X. Worse
Y. Much worse
1. Not known
2. Not applicable
58/

54. CHANGES IN THE SOCIAL CIRCUMSTANCES OF PATIENT'S DOMESTIC GROUP DURING THE YEAR AFTER DISCHARGE:

a) Marital state: _____

b) Residence: _____

c) Composition: _____

d) Major changes in the financial roles of members: _____

55. RATING OF LEVEL OF SOCIAL RESPONSIBILITY: 59/

1. 1 Supporting, M. and deps
2. 2 Sup., M. and 1 dep. or S. and deps.
3. 3 Sup., S. 1 dep.
4. 4 Self-sup., S, non-kin group
5. 5 Self-sup., S, own kin group
6. 6 Self-sup., M.
7. 7 Dependent, S.
8. 8 Dependent, M.

56. CHANGE OF LEVEL OF SOCIAL RESPONSIBILITY: 60/

(Compare 55 with 50).

X. Rise 5 points or over
Y. Rise 4 points
0. Rise 3 points
1. Rise 2 points
2. Rise 1 point
3. Same
4. Drop 1 point
5. Drop 2 points
6. Drop 3 points
7. Drop 4 points
8. Drop 5 points
9. Drop 6 points or over

57. MAJOR CHANGES IN PATIENT'S SOCIAL CIRCUMSTANCES AFTER THE FIRST YEAR:

a) Residence: _____

b) Composition and roles of household: _____

c) Occupation: _____

d) Financial: _____

58. PATIENT'S BEHAVIOUR:
(Categories apply to the state at one year after discharge if the patient is still out; or immediately before readmission)

a) Does he have outbursts of temper:
X. Frequently
Y. Occasionally
0. Never
1. Not known
61/

b) Does he show physical violence:
2. Frequently
3. Occasionally
4. Never
5. Not known
61/

c) Does he express strange ideas:
6. Frequently
7. Occasionally
8. Never
9. Not known
61/

d) Does he talk aloud to himself:
X. Frequently
Y. Occasionally
0. Never
1. Not known
62/

e) Do you get much emotional response from him:
2. Pathological
3. Apathetic
4. Normal
5. Not known
62/

f) Are you worried about his sexual behaviour:
6. Yes
7. No
8. Not known
62/

If yes, specify:_____
_____
_____

g) Can he look after himself:
X. Needs help
Y. Looks after himself
63/

h) Is his behaviour peculiar in any other way:
0. Yes
1. No
63/

If yes, specify:_____
_____
_____

PATIENT'S BEHAVIOUR: (contd)

i) Is he:
2. Nearly always alone
3. More usually alone than with people
4. As much alone as with people
5. Can't bear to be alone
63/

j) Are patient's contacts outside of household made:
7. Mainly in company with members of household
8. Mainly on his own
9. Non-existent
63/

k) Are patient's social contacts:
X. Mainly with relatives
Y. Mainly with friends
0. Mainly with casual acquaintances
1. Non-existent
2. Not known
64/

59. COMPARISON OF PATIENT'S BEHAVIOUR WITH THE TIME HE CAME OUT OF HOSPITAL:

a) Is his behaviour:
6. Better
7. Same
8. Worse
9. Not known
64/

Remarks:_____
_____
_____

60. OVERALL RATING OF BEHAVIOUR:

a) Abnormal in respect of:
X. No items
Y. 1 item
0. 2 items
1. 3 items
2. 4 items
3. 5 items
4. 6 items
5. 7 items or more.
65/

b) Global rating of behaviour:
6. Severely disturbed
7. Moderately disturbed
8. Normal
9. Not known.
65/

61. PATIENT IN THE HOUSEHOLD:
(Categories apply to state at one year after discharge if the patient is still out; or immediately before readmission)

a) Does any member of the household (including informant) complain of his behaviour:

X. Majority of members
Y. One member
0. None
1. Not applicable
2. Not known

66/

If yes, specify:_____
_____
_____
_____

b) Key person's reaction to patient's delusions and/or hallucinations:

3. Tolerant
4. Intolerant
5. Not applicable
6. Not known

66/

c) Is he helpful about the house:

X. Definitely helpful
Y. Tried to help
0. No help
1. Not applicable
2. Not known

67/

If yes, specify:_____
_____
_____

d) Does the patient's presence restrict the activities of any members of the household, as perceived by the informant:

3. Severe restriction
4. Restriction
5. No restriction
6. Not applicable
7. Not known

67/

If restriction, describe:_____
(e.g. going out, having friends in, holidays, etc.)
_____
_____
_____

61. PATIENT IN THE HOUSEHOLD:

e) How does this compare with the time he came out of hospital:

X. Better
Y. Same
0. Worse
1. Not known
2. Not applicable

68/

62. SOCIAL PARTICIPATION OF DOMESTIC GROUP:
(Categories apply to state at one year after discharge if the patient is still out; or immediately before readmission, or death)

a) Rating for each member of the domestic group (including patient).

		Member's initials	With members of household	With other than members of household
Rating I	Normal	_____	_____	_____
Rating II	Limited	_____	_____	_____
Rating III	Work only	_____	_____	_____
Rating IV	Severely Limited	_____	_____	_____
		_____	_____	_____

b) Relationship of patient's parents (applicable only if one or both is in patient's household).

3. Satisfactory
4. Unsatisfactory (estrangement or hostility)
5. Absent (including death of either spouse).
6. Not applicable
7. Not known

68/

c) Did household known about patient's illness:

X. Full knowledge
Y. Knew he had been in mental hospital
0. No knowledge
1. Not applicable
2. Not known

69/

Additional remarks: _____

d) Extra-household contacts of key member(s)

3. Definitely limited
4. Probably limited
5. Not limited
6. Not applicable
7. Not known

69/

Additional remarks: _____
_____
_____

63. IS THE PATIENT A RECIPIENT OF HELP FROM ANY PERSON OR GROUP OUTSIDE HIS HOUSEHOLD:

X. Yes
Y. No
0. Not known

If yes, describe:_____
_____
_____

70/

64. SOCIAL ENVIRONMENT OF THE HOUSEHOLD:

a) Do any relatives of the patient live in the vicinity:

1. More than one household
2. One household
3. None
4. Not known

70/

b) Do any relatives of the informant (if affinal relative of the patient) live in the vicinity:

5. More than one household
6. One household
7. None
8. Not known
9. Not applicable

70/

c) Neighbours' attitude (as perceived by informant) towards the patient:

X. Mainly hostile
Y. Neutral
0. Helpful
1. Not known

71/

d) Relatives' attitude (as perceived by informant) towards the patient:

2. Mainly hostile
3. Neutral
4. Helpful
5. Not applicable
6. Not known

71/

65. PHYSICAL HEALTH OF PATIENT IN THE YEAR AFTER DISCHARGE:

a) Is patient:

X. Severely incapacitated
Y. Partly incapacitated
0. Normal
1. Not known

If any disability, describe:_____
_____
_____
_____
_____

72/

65. PHYSICAL HEALTH OF PATIENT IN YEAR AFTER DISCHARGE: (Contd.)

b) Any major changes since first year: _____

66. HEALTH OF HOUSEHOLD MEMBERS:

a) Does any other member of the household have an incapacitating illness:
2. Yes
3. No
4. Not applicable
5. Not known
72/

b) If yes, specify who, and with what: _____

67. CONTACT WITH PSYCHIATRIC SERVICES DURING FIRST YEAR:

a) Has attended an O.P. clinic or entered a mental hospital for less than one month in the first year:
6. No
7. Once
8. More than once
9. Not known
72/

b) Has been visited by a P.S.W. or health visitor:
X. No
Y. Once
0. More than once
.1. Not known
73/

c) Any help from G.P. (as perceived by informant):
2. No
3. Once
4. More than once
5. Not known
73/

d) Any drugs taken for his psychiatric condition:
6. Yes
7. No
8. Not known
73/

If yes, specify: _____

68. DO YOU FEEL YOU WOULD LIKE HIM BACK IN HOSPITAL:

X. Definite yes
Y. Mixed feelings
0. Definite no
1. Not applicable
2. Not known

74/

If yes, why has he not returned:_____
_____
_____
_____

69. DID ANYONE URGE THAT THE PATIENT SHOULD BE SENT BACK TO HOSPITAL IN FIRST YEAR:

3. Definite yes
4. Qualified yes
5. No
6. Not applicable
7. Not known

74/

If yes, specify:_____
_____
_____
_____

70. RATING OF SOCIAL ADJUSTMENT OF PATIENT ONE YEAR AFTER DISCHARGE:

X. Full social adjustment
Y. Partial social adjustment
0. Marginal social adjustment
1. Bad social adjustment
8. Hospital cases
9. Not known

75/

71. KEY PERSON'S VIEW OF MENTAL ILLNESS:

a) Do you think he will be his old self again:

2. Curable
3. Incurable
4. Don't know
5. Not applicable
6. Not known

75/

Remarks:_____
_____
_____
_____

b) What do you think was the cause of the illness:

_____
_____
_____
_____

71. KEY PERSON'S VIEW OF MENTAL ILLNESS: (Contd.)

c) Was he at all to blame for what happened:
X. Severe blame
Y. Some blame
0. No blame
1. Don't know
2. Not applicable
3. Not known
76/

Remarks:_____

d) Did you think he might be dangerous to anyone:
4. Yes
5. No
6. Don't know
7. Not applicable
8. Not known
76/

e) Is there anything that could have been done differently:
X. Severe self-blame
Y. Some self-blame
0. No self-blame
1. Don't know
2. Not applicable
3. Not known
77/

Remarks:_____

f) Do you think this runs in his family:
4. Yes
5. No
6. Don't know
7. Not applicable
8. Not known
77/

Remarks:_____

72. KEY PERSON'S ATTITUDE TOWARDS PATIENT (INTERVIEWER'S RATING).
X. Strongly positive
Y. More positive than negative
0. Mixed feelings
1. More negative than positive
2. Strongly negative
3. Not applicable.
78/

Remarks:_____

73. LEVEL OF PATIENT'S INTERPERSONAL ADJUSTMENT WITH MEMBERS OF DOMESTIC GROUP (INTERVIEWER'S RATING): 78/

4. Active participation in emotional life; welcomed by all members
5. Gets on well with some, badly with others.
6. Tolerated, but emotionally non-contributing member
7. An unwelcome presence in the domestic group.
8. Not applicable

Remarks:_____

74. FAMILY HISTORY: (Admissions to mental hospital of other family members): 79/

0.
1.
2.
3.
4. (or more)

75. SOCIAL CLASS OF HOUSEHOLD TO WHICH PATIENT RETURNS: 79/

5. Middle class
6. Working class with middle class aspirations
7. Working class
8. Not applicable
9. Not known.

Criteria on which this rating is based:_____

76. HOW OTHERS TREAT PATIENT: 80/

Y. Patient dominates the household
X. Patient is treated as an ordinary person: reciprocal relationship
0. Patient is left to go his own way.
1. Patient is treated indulgently and/or protectively
2. Patient is firmly disciplined (including benevolent bullying).
-. Information insufficient for rating.
3. Hostile and rejecting patient.

77. YEARS BETWEEN KEY DISCHARGE AND DATE OF PRESENT INQUIRY (OR DEATH OF PATIENT):

9. 1-2 years
8. 2-3 years
7. 3-4 years
6. 4-5 years
5. 5-6 years
4. Over 6 years.

80/

78. "SOCIAL LIABILITY" (DISTRESS CAUSED TO OTHERS IN PATIENT'S HOUSEHOLD).

Severe
Moderate
Minimal

Appendix B

TABLES CITED IN THE TEXT

The tables shown in this appendix were derived from answers to the schedule of inquiry (Appendix A). Reference is made in the heading of each table to the item in the schedule to which it refers. The majority of these tables relate either to the total sample of 229 patients (of whom 156 survived in the community and 73 relapsed within one year), to the 156 schizophrenic patients (of whom 107 survived in the community and 49 relapsed), or to the 30 affective psychotics (of whom 20 survived and 10 relapsed).

Tables showing the levels of social adjustment are based upon the 156 patients in the total sample, or upon the 107 schizophrenics or 20 affective psychotics who survived in the community.

Where smaller sub-groups of patients are subjected to analysis, this is shown in the heading of the table.

Item 12

(i) Outcome by age-groups. (All patients).

Age	Survival	Relapse
20 - 34	44	27
35 - 54	84	38
55 - 65	28	8

No significant relationship. When over-55's are compared with the rest, $X^2 = 1.8338$, 1 d.f. $P > 0.1$

Item 12

(ii) Outcome by age-groups. (Schizophrenic patients).

Age	Survival	Relapse
20 - 39	36	22
35 - 54	56	25
55 - 65	15	2

Differences in outcome show a trend in favour of older patients but this is not significant. $X^2 = 4.212$, 2 d.f. $P > 0.1$. If over-55 group is contrasted with the rest, the difference still falls just short of significance: $X^2 = 3.4178$, 1 d.f. $P > 0.05$.

Item 12

(iii) Age and Social Adjustment Level (Surviving schizophrenic patients).

Age	Social Adjustment: Full or Partial	Social Adjustment: Poor
20 - 34	16	22
over 34	50	18

(In one case, information was inadequate for rating).

$X^2 = 10.245$, 1 d.f. $P < 0.01$.

Item 14

(i) Outcome by number of previous admissions.

	Survival	Relapse
None	63	18
One	43	23
Two	33	10
Three	10	11
Four	6	6
Five	1	1
Six or more	0	4
Totals	156	73

Item 14

(ii) Outcome of patients with no previous admissions contrasted with the rest.

	Survival	Relapse
No previous admissions	63	18
Previous admissions	93	55

$X^2 = 5.382$, 1 d.f. $P < 0.05$.

Item 14

(iii) Outcome of patients with three or more previous admissions

Previous Admissions	Survival	Relapse
Two or less	139	51
Three or more	17	22

$X^2 = 13.027$, 1 d.f. $P < .001$

Item 19

Outcome of patients treated by ataraxics

	Survival	Relapse
Treated	21	10
Not so treated	135	63

No relationship with outcome shown.

Item 20

Outcome of leucotomised patients

	Survival	Relapse
Leucotomised during this or previous admission	33	10
Never leucotomised	123	63

$X^2 = 1.8123$, 1 d.f. $P > .1$

Item 21

(i) Leaving hospital on or against psychiatrist's advice. (All patients).

	Survival	Relapse
Against advice	29	31
On advice	127	42

$X^2 = 14.661$, 1 d.f. $P < .001$

Item 21

(ii) Leaving hospital on or against advice. (Schizophrenics).

	Survival	Relapse
Against advice	23	24
On advice	84	23
Information not available		2

$X^2 = 13.460$, 1 d.f. $P < .001$

Item 22

(i) Outcome by rating of patient's state on discharge

	Survival	Relapse
Recovered	27	5
Relieved	110	47
Not improved	19	21

$X^2 = 11.999$, 2 d.f. $P < .01$

Item 22

(ii) Social adjustment by rating of patient's state on discharge. (Patients surviving in community).

	Social Adjustment	
Rating on discharge	Full or Partial	Poor
Recovered	21	6
Relieved	76	33
Not Improved	6	14

$X^2 = 9.438$, 2 d.f. $P < .01$

Item 23

(i) Duration from first symptoms to present admission. (All patients).

	Survival	Relapse
0 - 4 years	87	26
Over 4 years	69	47

$X^2 = 8.084$, 1 d.f. $P < .01$

Item 23

(ii) Duration from first symptoms to present admission. (Schizophrenics).

	Survival	Relapse
0 - 4 years	58	21
Over 4 years	45	27
(Precise duration not known..	4	1

X^2 = 2.069, 1 d.f.; not significant (P > .1).

Item 23

(iii) Duration from first symptoms to present admission. (Affective psychotics).

	Survival	Relapse
0 - 4 years	14	4
Over 4 years	5	6
(Not known	1	-)

X^2 = 3.161, 1 d.f. Not significant (P< .1, > .05)

Item 33

Duration of last occupation (in 2 years before admission).

	Survival	Relapse
More than one year	64	17
Less than one year	56	29
Not employed	36	27

$X^2 = 8.1066$, 2 d.f. $P < .02$

Item 36

Patient's level of social responsibility (on admission)

	Survival	Relapse
Supporting others	25	3
Self-supporting	66	29
Dependent	65	41

$X^2 = 8.617$, 2 d.f. $P < .02$

Item 38 g

Social disturbance caused at time of admission

	Survival	Relapse
Severe disturbance - neighbours involved	15	10
Severe disturbance - neighbours not involved	18	10
Severe disturbance - social agencies only involved	10	4
Slight disturbance - neighbours involved	4	6
Slight disturbance - neighbours not involved	48	24
Slight disturbance - social agencies only involved	41	13
(Information inadequate for rating	20	6)

$X^2 = 5.969$, 5 d.f. $P > .5$ (non-significant)

Item 41 h

Informant's attitude to prospect of patient's discharge

	Survival	Relapse
Eager	87	25
Showing slight or marked reluctance	29	28
(Not known	1	1)
(Not applicable	39	19)

$X^2 = 30.687$, 1 d.f. $P < .001$

Item 43 c

Was a job arranged for patient before discharge?

	Survival	Relapse
Yes	40	7
No	116	66

$X^2 = 7.680$, 1 d.f. $P < .01$

Item 45

Patient's formal status in household

	Survival	Relapse
Subordinate member	70	41
Peer	22	7
Head of household	29	10
Independent/alone	35	15

When subordinate members are compared with the rest, $X^2 = 4.071$, 1 d.f., $P < .05$

Item 46

Discrepancy of formal with actual status

	Survival	Relapse
Discrepancy	56	53
No discrepancy	100	20

$X^2 = 26.851$, 1 d.f. $P < .001$

Item 47

(i) Marital state on discharge

	Survival	Relapse
Single	106	49
Married	25	9
No longer married	25	15

No significant relationship to outcome

Item 47

(ii) Resumption of married life
(Ever-married schizophrenics: N = 32)

	Survival	Relapse
Returned to their wives	7	7
Did not return to their wives	16	2

$X^2 = 6.285$, 1 d.f., $P < .02$

Item 47

(iii) Resumption of married life
(Ever-married non-schizophrenic patients: N = 41)

	Survival	Relapse
Returned to their wives	16	1
Did not return to their wives	11	14

$X^2 = 11.067$, 1 d.f., $P < .001$

Item 48

(i) Household to which patient went

	Survival	Relapse
Institution	15	17
Parental	63	39
Marital	23	8
Other kin	29	7
Lodgings	26	2

$X^2 = 21.621$, 4 d.f., $P < .001$

Item 48

(ii) Household on discharge
(Relieved patients only: N = 138)

Household	Survival	Relapse
Parental	45	25
Other types of private household	55	13

$X^2 = 4.75$, 1 d.f., $P < .05$

Item 48

(iii) Outcome by types of household (Schizophrenic patients)

Type of household	Survival	Relapse
Hostel	6	7
Marital	7	7
Parental	55	31
Other relatives, Lodgings	20	4
	18	0

(One patient who went to live in a Mental After-Care Home, not included).

$X^2 = 15.4225$, 3 d.f. $P < .01$

Item 48

(iv) Outcome by two types of household: schizophrenic patients rated relieved on discharge only (N =93).

Type of household	Survival	Relapse
Parental and marital	44	22
Remote kin or lodgings	25	2

$X^2 = 6.733$, 1 d.f., $P < .01$

Item 48

(v) Household on discharge: schizophrenics and affective psychotics

	Schizophrenics		Affective Psychotics	
	Survival	Relapse	Survival	Relapse
Parental	55	31	0	3
Marital	7	7	11	0
Other	45	11	9	7

$X^2 = 7.636$, 2 d.f. $P < .05$ $X^2 = 12.28$, 2 d.f. $P < .01$

Item 48

(vi) Household on discharge - patients with epilepsy

	Survival	Relapse
Institution	2	0
Parental	5	5
Marital	0	0
Other kin	2	2
Lodgings	2	0

No significant association with outcome.

Item 49 a

(i) Change of domestic group on discharge (Schizophrenic patients)

	Survival	Relapse
Change	34	8
No change	73	41

$X^2 = 3.329$, 1 d.f.

(just short of significance at the .05 level)

Item 49 a

(ii) Change of domestic group (Affective psychotics)

	Survival	Relapse
Change	6	7
No change	14	3

$X^2 = 3.998$, 1 d.f. $P < .05$

Item 50

(i) Level of Social Responsibility (1 month after discharge)

	Survival	Relapse
Supporting and self-supporting	96	18
Dependent	60	55

Item 50

(ii) Level of Social Responsibility of Schizophrenics contrasted with that of Affective Psychotics

	Affective	Schizophrenic
Supporting	7	5
Self-supporting	12	69
Dependent	11	82

$X^2 = 17.097$, 2 d.f. $P < .001$

Item 50

(iii) Outcome in Schizophrenics and Affective Psychotics who were dependent on their wives (N = 21)

	Survival	Relapse
Schizophrenics	5	8
Affectives	6	2

$X^2 = 2.7523$, 1 d.f., $.1 < P > .05$.

Item 52 b

(i) Employment and outcome (Schizophrenic patients)

	Survival	Relapse
Work	78	10
No work	28	39
(N.K.	1	-)

$X^2 = 38.612$, 1 d.f. $P < .001$

Item 52 b

(ii) Employment and outcome
(Affective psychotics)

	Survival	Relapse
Work	15	6
No work	5	4

$X^2 = .178$, 1 d.f. Not significant

Item 52 b

(iii) Employment and outcome
(patients with epilepsy)

	Survival	Relapse
Work	8	2
No work	3	5

$X^2 = 3.3750$, 1 d.f. $P > .05, < .1$

Item 52 f

Level of work obtained after discharge.
(Patients who worked for at least 1 month: N = 132)

	Survival	Relapse
Semi-skilled manual or above	42	4
Routine manual work	67	19

$X^2 = 3.849$, 1 d.f. $P < .05$

Item 52 g

Job after discharge compared with job before admission

Hall-Jones scale rating	Survival	Relapse
Much better (2 classes or over)	15	3
Better	7	1
Same	56	16
Inferior	16	3
Much inferior (2 classes or more)	14	0
Not employed during the year	28	32
Not employed before or after hospital stay	17	18
Information inadequate for rating	3	0

Item 52 h

Proportion of discharge period spent at work.

	Survival	Relapse
Over 50% of time	87	10
Under 50% of time	20	12
Not employed	49	51

$X^2 = 15.1827$, 2 d.f. $P < .001$

Item 53 g

(i) Patient's financial contribution to the household

Patient's return made financial situation	Survival	Relapse
Better	44	6
No change	49	24
Worse	29	23
(Not applicable	31	20)
(Not known	3	0)

$X^2 = 12.93$, 2 d.f. $P < .01$

Item 53 g

(ii) Patients' financial contribution to household (Moderately disturbed patients only: N = 60)

Patient's return made financial situation	Survival	Relapse
Better	12	2
No change	15	10
Worse	16	5

$X^2 = 3.246$, 2 d.f. $P > .2$

Item 55

(i) Level of social responsibility (one year after discharge, or just prior to re-admission)

	Survival	Relapse
Supporting or Self-supporting	106	10
Dependent	50	63

$X^2 = 46.16$, 1 d.f. $P < .001$

Item 55

(ii) Level of social responsibility (one year after discharge, or prior to re-admission - patients rated moderately disturbed only: N = 79)

	Survival	Relapse
Supporting or Self-supporting	31	4
Dependent	21	23

$X^2 = 14.456$, 1 d.f. $P < .001$

Item 60 a

Number of traits indicating disturbed behaviour

Traits of disturbance	Survival	Relapse
NC	31	2
1	26	2
2	33	9
3	10	10
4	17	9
5	16	9
6	8	10
7	13	21
(Information incomplete	2	1)

$X^2 = 35.63$, 7 d.f. $P < .001$

Item 60 b

(i) Global rating of disturbance of behaviour

	Survival	Relapse
Severely disturbed	17	38
Moderately disturbed	51	29
Minimal or no disturbance	87	6
(Information inadequate for rating	1	0)

$X^2 = 63.316$, 2 d.f. $P < .001$

Item 61 a

Complaints about patient by other household members

	Survival	Relapse
By majority of household	25	30
By one member	16	14
No complaints	99	13
(Not applicable	9	8)
(Not known	7	8)

$X^2 = 22.404$, 2 d.f. $P < .001$

Item 61 d

Restrictions imposed on others in household

	Survival	Relapse
Others' activities restricted	29	31
Not restricted	98	21
(Not applicable	28	19)
(Not known	1	2)

$X^2 = 22.39$, 1 d.f. $P < .001$

Item63

Help from outside the household

	Survival	Relapse
Help received	37	7
Not received	114	62
(Not known	5	4)

$X^2 = 6.103$, 1 d.f. $P < .02$

Item 66 a

Does any other person in the household suffer from an incapacitating illness?

	Survival	Relapse
Yes	39	26
No	87	29
(Not applicable	29	18)
(Not known	1	0)

$X^2 = 4.43$, 1 d.f. $P < .05$

Item 67 a

Out-patient attendances following discharge

	Survival	Relapse
None	128	58
One	5	7
More than one	19	6
(Not known	4	2)

No significant relationship

Item 67 b

Home visits by P.S.W. following discharge

	Survival	Relapse
None	122	59
One or more	28	11
(Not known	6	3)

No significant relationship

Item 70

(i) Levels of Social Adjustment of Schizophrenic and all other patients surviving in the community

	Social Adjustment		
	Full	Partial	Poor
Schizophrenics	39	28	40
All others	23	13	13

$X^2 = 2.090$, 2 d.f., $P > .3$

Item 70

(ii) Levels of social adjustment of Affective Psychotics and all other patients surviving in the community.

	Social Adjustment		
	Full	Partial	Poor
Affective Psychotics	11	7	2
All others	51	34	51

$X^2 = 5.9675$, 2 d.f., $P < .05$

Item 70

(iii) Social adjustment levels of patients in different types of household

(All patients remaining out of hospital, except those in institutions: N = 141).

	Social Adjustment	
Household	Full or Partial	Poor
Parental	33	30
Marital	18	6
Other kin	21	8
Lodgings	21	4

Constrasting Parental with all other groups, $X^2 = 10.136$, 1 d.f. $P < .01$

Constrasting Parental with Marital group, $X^2 = 3.666$, 1 d.f. $P > .05$

Item 70

(iv) Social adjustment and living group.

('Relieved' patients surviving in the community: N = 109)

Type of household	Social Adjustment: Full or Partial	Poor
Parental	26	18
All others	50	15

$X^2 = 3.9525$, 1 d.f. $P < .05$

Item 70

(v) Social adjustment and household (all schizophrenics)

Type of household	Social Adjustment: Full or Partial	Poor
Hostel	4	2
Marital	4	3
Parental	28	27
Sibling or lodgings	30	8

$X^2 = 7.653$, 3 d.f. $P > .05$ (just short of significance)

Item 70

(vi) Social adjustment and household

(schizophrenics rated relieved on discharge only: N = 101)

Type of household	Social adjustment	
	Full or Partial	Poor
Hostel	3	1
Marital	3	1
Parental	28	27
Sibling or lodgings	30	8

$X^2 = 8.585$, 3 d.f. $P < .05$

Item 71 d

Does informant think patient might be dangerous?

	Survival	Relapse
Yes	13	19
No	100	28
(Not elicited	11	8)
(Not applicable	32	18)

$X^2 = 17.352$, 1 d.f. $P < .001$

Item 72

Informant's attitude towards patient after discharge.

	Survival	Relapse
Positive	112	34
Mixed	7	13
Negative	6	8
(Not applicable	32	17)

$X^2 = 19.611$, 2 d.f., $P < .001$

Item 73

Patient's relations with others in household

	Survival	Relapse
Actively welcomed	72	6
Tolerated	28	14
Welcomed by some, not by others	18	18
Unwelcome	9	17
(Not applicable	29	16)
(Not known	0	2)

$X^2 = 40.904$, 3 d.f. $P < .001$

Item 74

Family History of Mental Illness

	Survival	Relapse
No relatives affected	106	51
One relative affected	34	16
More than one relative affected	16	6

No significant relationship to outcome

Item 75

(i) Social class of household to which patient returned

	Survival	Relapse
Middle-class	27	18
Working-class with middle-class aspirations	16	7
Working-class	103	45
(Information inadequate for rating	10	3)

$X^2 = 1.745$, 2 d.f. (Not significant)

Item 75

(ii) Social class and social adjustment level.

Household	Social adjustment: Full or Partial	Social adjustment: Poor
Middle-class	16	10
Working/Middle	7	9
Working-class	70	32
(Not ascertainable for 12 patients)		

$X^2 = 3.8736$, 2 d.f. $P > .1$

Contrasting middle category with the rest, $X^2 = 3.416$, 1 d.f. $P > .05$

Item 76

(i) Method of handling patient, and outcome

	Survival	Relapse
Patient dominates household	7	10
Patient is firmly disciplined	13	9
Patient is indulged	44	18
Patient is left alone	51	20
Reciprocal give and take	38	2
Frank hostility towards patient	2	12
(Information insufficient for rating	1	2)

X^2 (excluding "Frank hostility") = 20.244, 4 d.f. $P < .001$

Item 76

(ii) Method of handling patient and social adjustment reached.

(All patients surviving in the community)

	Social adjustment	
	Full or Partial	Poor
Patient dominates household	2	5
Patient is firmly disciplined	9	4
Patient is indulged	15	29
Patient is left alone	39	13
Reciprocal give and take	35	2
Frank hostility towards patient	2	0

(Information not obtainable for 1 patient)

Comparing first five modes of interaction: $X^2 = 40.897$, 4 d.f. $P < .00$