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Chronic Schizophrenic Patients in the Community

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SUMMARY A sample of 190 patients, diagnosed as schizophrenic by the same psychiatrist, have been surveyed in an urban community and their clinical and social status assessed. Compared to the local population as a whole, a significantly greater proportion of the men had never married, and although the women had married at approximately the same rate as those in the general population, 25 per cent of them had been divorced by the time of the interview. Assessments of the subjects' clinical condition by the Present State Examination were analysed into four groups of syndromes. Only 27 patients showed schizophrenic or paranoid symptoms, whereas neurotic symptoms were not only prevalent but seemed to cause most of the reported personal problems. Twenty-eight patients were free of symptoms at the time of interview. The great majority of the sample (72 per cent) were being maintained on long-acting neuroleptics. These data will form the baseline to assess a monitoring system, designed to keep the local psychiatric services in touch with schizophrenic patients who might otherwise drop out of treatment.

Introduction

Over the last twenty years many people suffering from severe psychiatric disorders have left the large psychiatric hospitals to live for long periods in the general community. This change was made possible to a large extent by the introduction of the major neuroleptic drugs, though social and administrative processes, such as the Mental Health Act, were also important. Over the course of time, community services have grown in response to this change, and various agencies have become involved—Social Service Departments, voluntary organizations, general practitioners, community psychiatric nurses, out-patient clinics and day care of various kinds. However, the system is generally incomplete, and co-ordination between different facilities rarely as effective as is required (Freeman, 1976).

The schizophrenic patient in the community can pose special problems. Though most are dependent on neuroleptics to maintain a state of reasonable mental health, they are generally required to manage their own treatment, either by taking tablets or by attending out-patient clinics for injections, apart from the help of relatives. At the beginning of relapse, when insight deteriorates, the patient who is left to his own devices will often stop any treatment, whereas on rational therapeutic grounds treatment should probably be stepped up or changed. This means that relatives may bear the brunt of a major relapse, unless they can call professional services in for advice at the right time and the services respond quickly and appropriately.

Many families learn to manage unaided, in the absence of available services, but the price can be high (Wing and Creer, 1974). Obviously it would be extremely difficult to find the resources to keep all schizophrenics in the community under continuous surveillance, and some might think it an undesirable invasion of their privacy in any case. If services are to be improved, however, they must first be studied to find out exactly what they do. Their clients must also be studied to determine what help they re-

ceive, what they need and what is the effect of present intervention by medical and social services.

We are reporting here on the first phase of a project which aims to evaluate a system for the continuous monitoring of services for people in the community suffering from schizophrenia. The present phase provides baseline data on a sample of individuals diagnosed as schizophrenic and living outside hospital during 1974. These data were obtained for the purpose of dividing the sample into an experimental and a control group and of providing initial information on the patients for later comparison. A monitoring system is being tested to see if it will prevent patients dropping out of treatment; and in the final phase the two groups will be compared to see whether the arrangement has produced any benefit in clinical condition or has otherwise altered their experiences during the period of study. The monitoring system will then have been in existence for a year, and the amount of data should be adequate after this length of time to provide conclusions about it.

Method

We were fortunate in having at our disposal the services of the Salford Case Register, and this provides data from 1968 on all persons who have been in contact with any psychiatric service and who are resident in the former County Borough of Salford (Fryers, Freeman, and Mountney, 1970); the register has now been extended to cover the present Metropolitan Borough. We chose as our sampling frame all those people who: (a) were diagnosed as schizophrenic on criteria of symptoms, assessed from case notes and clinical knowledge of the patients; (b) were in contact with a psychiatric service during 1974; and (c) were not long-stay hospital patients (i.e. over 12 months). As the study was launched in June 1975, this meant that any diagnosis was liable to be more settled than it would have been for new cases. We also felt that the time was short enough for those who had recovered not to feel that they were having their past raked up.

We excluded all those over 65 years of age, on the ground that they would have problems over and above that of schizophrenia. This left us with 282 persons to trace and interview. We then had to exclude 32 who had moved out of the area after their last episode of illness and who were therefore getting any treatment from services other than those of Salford. Fourteen could not be traced, as their last known address had been demolished. The diagnoses were checked by H.L.F. according to current British criteria, and another 13 individuals were then dropped because their diagnoses were either doubtful or multiple. Nineteen refused to be interviewed, either openly on the doorstep or tacitly by making an appointment for some later date and then not answering the door after several visits. Fourteen had died between 1974 and the time of interview, which was between February and July 1976. The final sample, therefore, numbered 190. These were all under the care of only two consultants, which considerably lessens any variance due to different methods of treatment and admission policies; the two consultants had been working closely together for a number of years.

Interviewing

The patients were interviewed in their own homes (except for a small number who had been admitted to hospital and five who preferred to be interviewed at a day hospital). A.J.C. was trained to use the Present State Examination (Wing *et al*, 1974), and this was used to elicit the patients' clinical condition. J.K. administered a questionnaire based on the work of McCowen and Wilder (1975) in order to assess the social situation as well as the patients' view of the illness and how it affected their way of life. J.K. also interviewed the relatives, where there were any, and elicited their attitudes to the patient and any problems they had connected with him. If the relatives or the patients were not at work this could usually be done in a single session. On average, two calls had to be made before we got an interview, but the maximum was seven; 63 patients let us in there and then. Where multiple calls had to be made, this was usually because the address in the notes was not the latest, or because the patients were out at work. H.L.F. was responsible for clinical advice throughout the research.

The Present State Examination (PSE) elicits the presence or absence of 140 symptoms,

which can then be grouped into syndromes by using the test manual (*op. cit.*). We felt that it would be an over-simplification to use some global rating of clinical condition, such as the total number of syndromes suffered. These could range from the floridly psychotic to the mildly neurotic and could by no means be treated with equal weight. For this reason we divided the 35 syndromes into four groups and then considered each group separately in all the analyses.

The groups of syndromes were derived from the syndrome profiles of seven CATEGO classes in the PSE manual. Any grouping is somewhat arbitrary, as syndromes are not mutually exclusive to any one class. Even when we took syndromes which appeared in more than 50 per cent of the cases in the International Pilot Study of Schizophrenia (WHO, 1975), some were still not exclusive to one group, and we had to group them according to where they were most prevalent. For instance, Simple Depression and General Anxiety appear in more than 50 per cent of the cases in the profiles for CATEGO classes: Schizophrenia, Paranoid, Depression, Neurosis and Anxiety. We ended up with four groups, which we have called Schizophrenic and Paranoid (S&P); Manic and other Psychoses (M&O); a borderline group of psychotic syndromes which were difficult to classify (P) and a group of neurotic syndromes (N).

It was possible to give each patient a score for each syndrome that was present and a total for each group. Once again, it is spurious to use these sample totals as though they were parametric variables. Someone with a score of 4 is not necessarily twice as ill as someone with a score of 2. The most we can say is that they are more ill. For this reason, the group totals for each patient were ranked, No. 1 being the most ill; this being done, other variables could be tested against their clinical condition, using the Kruskal-Wallis one-way analysis of variance.

Results

These results describe the sample patients and their way of life in four ways. Firstly, demographically, in terms of age, status and with whom they were living. Secondly, socially, in terms of type of accommodation and work, if any. Thirdly, subjectively, in the way they saw their illness and the effect this was having on their life (this aspect is dealt with more fully in a separate paper, see Korer, 1977). Fourthly, clinically, in the number and type of symptoms from which they were suffering.

There were 91 men and 99 women in the sample. The average age of the men was 42·9 (SD 12·3) and of the women 48·3 (SD 8·7). The distribution of ages between the sexes was significantly different by the Kolomogorov-Smirnov test ($D = \cdot 23$, $P < \cdot 025$); 52 per cent of the men were aged under 45, but only 35 per cent of the women.

When we look at the number who have ever married, i.e. married, divorced, separated, and widowed, we find that there were significantly more men who had never married ($\chi^2 = 24 \cdot 4$, 1 df, $P < \cdot 001$).

Only 16 men were living with their family of marriage (one single cohabitee was included in this classification), whereas 40 women were (3 divorcees still had children with them). There was little difference in the numbers living alone (16 men and 14 women), but 39 men and only 19 women were living with their parents. The remainder ($N = 46$) were living with siblings, friends, their grown-up children or in group homes. One was in prison and 11 had been admitted to hospital since the drawing of the sample. The larger number of men living with their parents and the smaller number living with their family of marriage was significant ($\chi^2 = 17 \cdot 7$, 3 df, $P < \cdot 001$).

The sample came from all parts of Salford, but, as is often the case, they were not distributed proportionately throughout the Borough in relation to general population. This non-

TABLE I

Marital status of the sample at the time of interview

	Men	Women	Total
Married ..	15	37	52
Divorced ..	4	17	21
Separated ..	5	8	13
Widowed ..	4	6	10
Single ..	63	31	94
	91	99	190

uniform distribution is not as easy to interpret as information from some past studies has been, since the biggest concentrations were in areas where the housing is comparatively new. However, it can generally be assumed that these people have been rehoused from the previously worst areas, which have now been demolished. It is difficult to get information on population density, because of the changes in local authority boundaries, but we have the impression that the sample tends to cluster in the more densely populated areas. This impression is not surprising when it is realised that the polling districts where our sample formed the highest proportion of the population were predominantly composed of high-rise flats.

Seventy-seven of the sample lived in post-war council housing (42 in high-rise flats, 23 in middle-rise and 12 in new housing estates). Eighty-five lived in pre-war housing, with the bulk of these (57) living in the ubiquitous terraces; of the rest, twenty lived in semi-detached housing and eight in council flats. The remainder (28) lived in a selection of accommodation, ranging from a bed-sitter (2) to what might be described as suburban villas (9).

Forty-nine were working at the time they were interviewed (24 men and 25 women). One might have expected that the married men would have a disproportionate share of the work and that married women would tend to be unemployed, but this is not borne out by the data, and the distribution according to marital status of those working is almost exactly what would be expected by chance ($\chi^2 = 0{\cdot}73$, 3 df, not sig.). Only 28 of those not working found it a serious problem, and this was usually because they needed more money.

Social isolation was a problem for 48, and this was by no means confined to those living alone. One man living in a household of 12 (the most overcrowded in the sample) complained that he felt socially isolated, partly because he was not working and had not got the money to go out. As a group, the socially isolated were no more unemployed than the rest of the sample ($\chi^2 = 0{\cdot}39$, 1 df, not sig.). They did not appear to go out less often either ($\chi^2 = 0{\cdot}43$, 1 df, not sig.) but a significantly greater number of them said that they wanted more to do—28 of the socially isolated said that they wanted more to do and 19 said that they did not, whereas of the remainder of the sample 22 said that they wanted more and 111 said that they did not ($\chi^2 = 29{\cdot}9$, 1 df, $P < {\cdot}001$).

Other significant factors with this group were that they felt they were 'loners' as children and that they did not find it easy to make friends. Whether they were living alone or not did not seem to be related to this finding, as only six were doing so. Social isolation was not associated particularly with either sex or marital status ($\chi^2 = 3{\cdot}4$, 3 df, not sig.). The length of time that patients had been resident at their present address was not significant, contrary to expectation; the mean was 12 years for the socially isolated and 10 years for the rest. Although 120 of the sample said that they found it easy to make friends, only 64 of them had actually had one that they could go to with their problems.

Only 157 of the PSEs were satisfactory for research purposes, and the remainder of the results have to be based on these. The other 33 were discarded, on the grounds laid down in the manual. Sometimes patients could not or would not answer the questions. Sometimes there was good reason to believe that they were being evasive, with glib yeses or noes. Sometimes the relative would choose to answer questions, and on one occasion there was a language difficulty.

The overall symptomatology of the sample can be seen in Table II, where the syndromes are listed in order of prevalence.

Twenty-eight of the sample were free of symptoms at the time of interview, and 50 had their symptoms confined to the neurotic group. The combinations of symptoms suffered by the sample can be seen in Table III; these groups are not mutually exclusive, and most patients showed mixed pictures. Thus, 27 showed some schizophrenic or paranoid symptoms, 70 showed some symptoms of manic or other psychotic syndromes, 31 showed some borderline psychotic symptoms and 124 showed neurotic symptoms.

Using the Kruskal-Wallis one-way analysis of variance, it is possible to test the ranked data on clinical condition against other variables. Pure-

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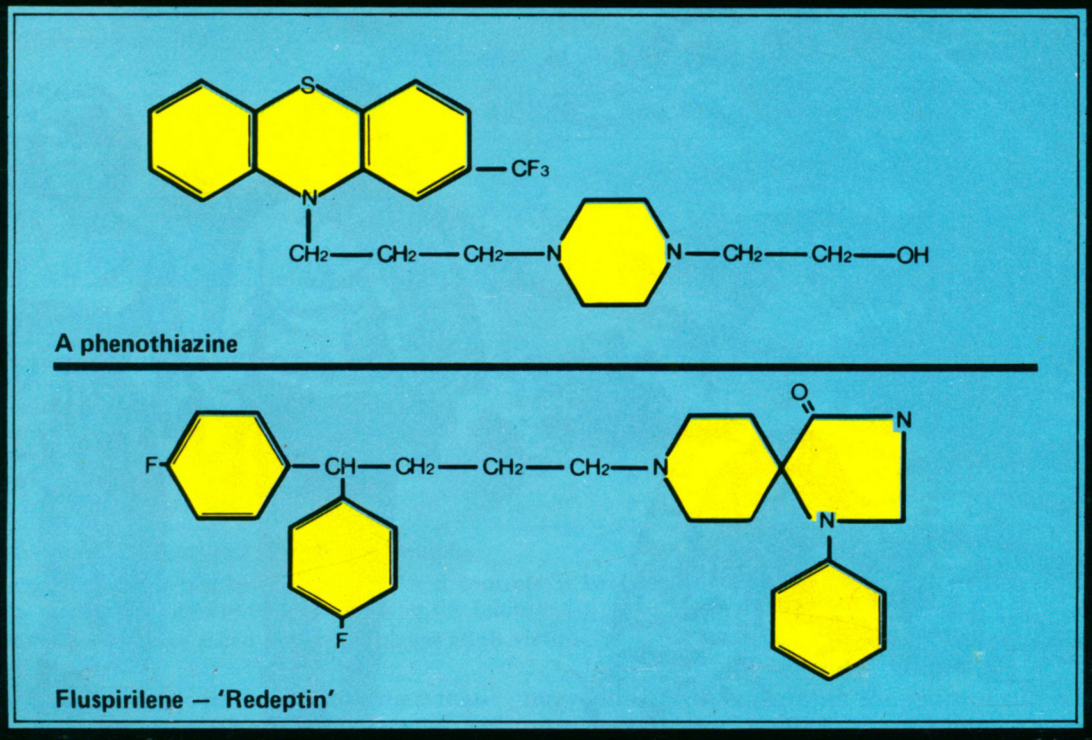

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TABLE II

Syndromes elicited at interview in order of prevalence and according to Project group

Project group	Syndrome	Patients in sample with syndrome
N	Worrying	89
N	Social unease	69
N	Tension	59
N	Simple depression	57
N	Special features of depression	49
N	Lack of energy	48
N	Loss of interest and concentration	42
M & O	Slowness	33
M & O	Affective flattening	30
N	Irritability	30
N	Other symptoms of depression	29
M & O	Non-specific psychosis	28
N	General anxiety	23
N	Ideas of reference	23
P	Sexual and fantastic delusions	18
S & P	Nuclear syndrome	15
N	Situational anxiety	15
M & O	Residual syndrome	10
M & O	Hypomania	9
S & P	Delusions of reference	8
N	Obsessional neurosis	8
N	Hypochondriasis	7
S & P	Auditory hallucinations	7
S & P	Visual hallucinations	6
S & P	Delusions of persecution	6
P	Hysteria	6
P	Organic impairment	6
P	Depersonalization	4
S & P	Olfactory hallucinations	4
M & O	Grandiose delusions	4
M & O	Incoherent speech	2
M & O	Catatonic syndrome	0
P	Subcultural delusions	0

N =Neurotic
M & O =Manic and other psychoses
P =Psychotic
S & P =Schizophrenic and paranoid

TABLE III

The combinations of groups of syndromes suffered by the sample

No.	S & P	M & O	P	N
50				*
36		*		*
28				
13	*	*	*	*
10		*	*	*
7	*	*		*
4			*	*
2	*		*	*
2	*			*
2	*	*	*	
2		*		
1	*			
157	27	70	31	124

* The asterisks denote the presence of symptoms in that group of syndromes.

ly for illustration purposes we quote the average ranks of groups, which can be compared to each other and the median of 79. There was no difference between the sexes in this respect on any of the four syndrome groups. The 32–41 age group was significantly worse in the Psychotic (P) group (average rank 58·0, Median = 79, Kruskal-Wallis H = 17·0, P < ·001) and the 16–41 age group were worse in the Neurotic (N) group (average rank = 67·0, H = 9·0, P < ·05). Who, if anybody, the patients lived with did not appear to be associated with their clinical condition. Those who said that they went out in the evening less than once a week were significantly more neurotic (average rank = 68·0, H = 9·0, P < ·02) and those who said that they went out five times or more often were worse in the Psychotic (P) group (average rank = 65·0, H = 6·7, P < ·05).

Whether the patient was working or not seemed to be the social characteristic having the strongest association with clinical condition. It is not surprising that those who were working were least ill. In the Schizophrenic and Paranoid (S&P) group of syndromes, those who were working had an average rank of 88 and those who were not had one of 75 (H = 5·6, P < ·02). In the Manic and Other Psychoses (M&O) group, the average rank was 92 for those working and 73 for those not (H = 7·0, P < ·02). In the Neurotic (N) group, the average rank for those working was 100 and of the rest 70 (H = 13·9, P < ·001). There was no significant difference in the Psychotic (P) group syndromes.

Those who felt that they were socially isolated did not appear to be any more psychotic than the rest, but they were significantly more neurotic (average rank = 55, H = 15·3, P < ·001).

Thirty-four of our sample were not on any treatment for psychiatric disorder and they were not significantly different from the rest of the sample as far as their clinical condition was concerned. The bulk of those on treatment (137 or 72 per cent) were receiving depot phenothiazines, and 86 were getting these at the psychiatric unit of the District General Hospital; others (16) went to the out-patient department at the psychiatric hospital. The community psychiatric nurses visited 18 for injections, and 17 attended clinics conducted by nurses at health centres. Nineteen were being treated by their general practitioners with oral medication only, at the time of interview.

Discussion

We have been studying a sample of people who have been diagnosed as schizophrenic, but who are able to spend the bulk of their time out of hospital. During the year prior to the study, 144 had not spent any time in hospital, 9 had spent an average of 119 days as day-patients, and 38 had spent an average of 72 as in-patients. When we consider that they have all been in contact with some psychiatric service for an average of 12 years and that the majority have been maintained on depot phenothiazines, it is clear that their handicaps are still moderately severe, and that these cannot be attributed to any recent effects of an institution. Clearly, as a group, they have been subject to a marked degree of chronic psychiatric illness.

Most of our men (69 per cent) had never married; this is more than twice as many as for the population of Salford within the same age range (31 per cent, Census 1971). The women in the sample show the same trend, but by no means to the same degree; 32 per cent had never married, whereas the figure for the female population of Salford over 15 years of age is 23 per cent. However, 25 per cent of the women had been divorced, compared to the 2 per cent of the population. Perhaps it really is the male who takes the initiative in the matter of popping the question, and the man suffering from schizophrenia lacks this initiative. The women, on the other hand, get the question asked for them, but this does not mean that the marriage will be successful.

The predominance of younger men in the sample is difficult to explain, and we thought at first that it was due to sampling error. However, the same kind of distribution applies to the population from which the sample was drawn (39 per cent of the men are under 45 and 22 per cent of the women). This is even borne out in the International Pilot Study of Schizophrenia (WHO, 1975); unfortunately, their age range only goes up to 44, but 81 per cent of the men in that total sample of 552 were under 35 and only 67 per cent of the 650 women.

Social isolation was a problem for a quarter of the sample; this was a purely subjective evaluation on the part of the patient and must be taken at face value. These people felt that they were cut off from others and they they could not mix on an equal footing. It could also be said that they had a certain amount of insight and were able to appreciate that their lives were lacking in this respect. Many of those who did not complain of social isolation did in fact appear to be subjected to it, by the standards of the observers. They lived alone, did not go out and had no friends, but did not seem to consider this to be a problem. Perhaps, indeed, it is not a problem to those subjects with the more schizophrenic handicaps, since it has been suggested that such patients are unable to screen the stimuli with which they are bombarded and sort out those which are relevant (Venables, 1968). If this is the case, one way of overcoming the problem would be to stay in a relatively tranquil environment and avoid any over-arousal. It would be interesting to see how those who do feel isolated would respond if the 'problem' were remedied.

The clinical condition of the sample was surprising, as there were 41 per cent without any visible signs of psychosis at the time of interview. It is likely that this must be largely attributed to medication; only 8 of these 78 were not taking some form of neuroleptic. The consensus of information about the prognosis of schizophrenia and about the effectiveness of neuroleptics strongly suggests that an untreated group would give a very different picture. However, most of the patients on treatment were responsible for getting their medication themselves, as only 18 had it taken to them by

community nurses. The attitude towards treatment was mostly positive. At the two extremes, we got comments like, 'Oh, I couldn't go without my jab' to 'I'm going to give it up; it makes me worse.' However, the majority came in between and said either that they felt better for it and were afraid of breaking down if they stopped treatment, or that the doctor said that they had got to have it and so they had it. Seventy-five per cent knew what the treatment was for, in vague terms ('nerves', 'to calm me down'), but there were still the occasional patients who believed that they were having some physical condition cured ('indigestion', 'rheumatism', 'change of life').

It is surprising also to find that it is almost exclusively the neurotic problems which are found to be associated with social handicaps, e.g. isolation, unemployment. It is those who are least neurotic who are working, and one would like to think that the work may help them to overcome certain aspects of their illness. The socially isolated were more neurotic than the others, as were those who tended to stay at home in the evenings. The most prominent syndrome was 'worrying', and Leff (1976) reports a similar finding from the International Pilot Study of Schizophrenia (*op. cit.*). It was the patients with a predominance of neurotic symptoms and especially 'worrying' who gave the impression that they felt their handicaps the most. Neuroleptics seem to control much of the psychotic symptoms, but satisfactory methods of dealing with these patients' neurotic problems still remain to be developed. However, the very low level of psychotic disturbance in this large group of people with a diagnosis of schizophrenia is something of a tribute to the efficacy of medication and particularly to that of the long-acting neuroleptics.

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