THE MULTIPLE READMISSION PSYCHIATRIC PATIENT

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During the first 10 years of operation of the Houston (Texas) Veterans Administration Hospital (1949-1959) it was noted that a minority of the patients moved in and out of the hospital repeatedly, without apparent improvement. The general impression of the staff was that these patients were mainly alcoholics and sufferers from personality disorders, that they were homeless and jobless, and that they were not motivated for treatment. This study was undertaken in an attempt to provide some objective data on these and related questions.

Method of Study

Statistical data, including demographic data, diagnoses, movements in and out of the hospital, and so on were reviewed for all psychiatric admissions. All patients who had had four or more admissions were selected as the "experimental group." For certain comparisons pertaining to alcoholism, the group of patients with six or more admissions was studied. Finally, the group (N=17) with 10 or more admissions (the highest was 16) was studied in greater detail by a perusal of all clinical records. Only male admissions to this hospital, to a psychiatric ward, were included.

Two control groups of 100 each were set up:

1.) The "single admission controls" were selected at random, 10 from each year, limited to patients who had had only one admission (to maximize the contrast with the repeaters).

2.) The "random controls" were selected in a random manner from all first admissions, the number chosen from each year being kept in proportion to the total number of admissions that year. This second group is, therefore, the better sample of the individuals this hospital is dealing with.

It is recognized that generalizations from these data must be limited, since this is a Veterans Administration general hospital (400-bed psychiatric service), giving admission priority to service-connected patients, and operating under numerous local customs and policies. In a sense, the findings tell as much about the admission and discharge policy of the hospital as they do about the

patients. Still, it is the writer's impression that a very similar experience with "in and outers" prevails in most psychiatric hospitals.

Findings

Readmission Rates. In 10 years, approximately 6,950 separate individuals have been treated on the psychiatric wards of this hospital. Based on a 10 per cent sample of all individuals, 75 per cent have had only one admission, 17 per cent have had two, 4 per cent have had three, and 4 per cent have had four or more (up to 16). It is this last 4 per cent that have been studied. By actual count (no longer by sampling), there have been 300 such patients (the round number is fortuitous). One hundred thirty-three patients have had four admissions, 81 have had five, 37 have had six, 12 have had seven, 13 have had eight, 7 have had nine admissions, and 17 have had 10 or more.

Principal Diagnosis. The random controls showed 9 per cent of manic-depressives, 32 per cent of schizophrenics, none of paranoid states, 29 per cent of neurotics, 15 per cent of personality disorders, 12 per cent of alcoholics, and 3 per cent of organic brain syndromes. The single admission controls were not significantly different except for showing 11 per cent of organic brain syndromes. The four-and-over admission group had fewer manic-depressives (4 per cent), more schizophrenics (43 per cent), and fewer alcoholics (8 per cent), but showed no other noticeable differences. It is surprising to the author that the readmission group contains more schizophrenics and fewer individuals with the principal diagnosis of alcoholism. As will be noted later, there is much alcoholism and drinking among the readmissions, but this seems to be in individuals who have some other psychiatric disorder, often schizophrenia.

Trend Toward Psychosis or Away from Psychosis. It had been predicted that many patients might show a gradual shift in diagnosis on subsequent admissions, as compared to the first, from a neurosis or personality disorder to schizophrenia. Or there might be a shift to a diagnosis of alcoholism or personality disorder (from neurosis or psychosis), as the patient resisted change but kept coming in and out. Neither trend was found to be true to any great degree. About 25 cases (of 300) showed a trend in each of these directions, but the other 250 remained in the same general category.

Alcoholism Diagnosed at any Admission. The rates for alcoholism given earlier apply to the principal (most frequent) first-listed diagnosis. The records were next tabulated in terms of a diagnosis of alcoholism made at *any* admission, either as a primary or secondary diagnosis. For the single-admission controls the rate was 15 per cent, for the random controls the rate was 17 per cent and for the four-and-over admission cases the rate was 34 per cent. If the latter group is subdivided further, there is a steady rise: in cases with four to six admissions, 29 per cent, in seven to nine admissions, 56 per cent; in 10 or more admissions, 59 per cent. Thus there is a close relationship between the number of readmissions and a diagnosis of alcoholism made at some time during one's hospital career.

Service-Connected Status. Service-connection for psychiatric conditions was studied. The rates were as follows: single-admission controls, 30 per cent; random controls, 31 per cent; four to six admission cases, 59 per cent; seven to nine admission cases, 56 per cent; 10 or more admissions, 82 per cent. The whole group of four-and-over admission cases was 60 per cent service-connected. As expected, the service-connected patients, who have priority for admission, make up an increasing proportion of the groups as one goes from single admissions to multiple admissions.

Type of Ward to Which First Admitted. The type of ward was studied in terms of the first admissions of each patient, since this is likely to be where a characteristic relationship between a patient and an institution may be set up. The main differentiation of the wards is into open and closed. The rates are as follows: single-admission controls, 61 per cent closed ward admissions; random controls, 57 per cent closed ward admissions; a large three-year sample, 67 closed; four to six admission cases, 59 per cent closed; seven to nine admission cases, 59 per cent closed; 10-and-over admission cases, 64 per cent closed. Thus the type of ward to which the patient was first admitted does not help in indicating the future multiple readmission case.

Race. Negroes in both control groups, in a large sample of 664 patients, and in the city of Houston (1950) were in each instance around 20 per cent. The Negro cases in the 300 individuals who had had four or more admissions was 16 per cent. There does not appear to be any significant difference here.

Marital Status. Marital status was analyzed in terms of the marital status at the time of first admission. Unfortunately, data were not available for changes in marital status with multiple admissions. However, even comparison with the status at the time of first admission shows some differences.

It will be noted that the proportion of divorced and single patients rises at the expense of the married group as one goes from the single-admission to the multiple-admission group. This tends to confirm the impression that many of the repeater patients are the "homeless" ones, without current family ties.

Birth Date. The birth dates of the multiple-admission group were plotted over those of the two control groups, and the curves were almost identical.

The Factor of Alcoholism

Since it appeared that alcoholism was a prominent factor, it was decided to study this further. For this portion, the experimental group ("readmission cases") consisted of all individuals with six or more admissions. Some of the comparisons made earlier were repeated; but in each cell or compartment of the table, there was a further subdivision of "alcoholics" (those given a diagnosis of alcoholism at any time) from "nonalcoholics."

Service-Connection vs. Alcoholism. In the two control groups, almost all patients diagnosed as alcoholic are in the non-service-connected category. In the readmission group, however, 20 of 55 service-connected cases are also diagnosed as alcoholic, as contrasted to 22 of 29 non-service-connected cases. Thus alcoholism

Table 1. Marital Status At First Admission

	Single		Married		Divorced		Widowed		Total	
	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Single-admission controls	22	22	69	69	7	7	2	2	100	100
Random controls	24	24	66	66	9	9	1	1	100	100
4 to 6 admission cases	62	24	135	53	51	20	3	1	251	100
7 to 9 admission cases	13	41	10	31	9	28	0	0	32	100
10 and more admission cases	6	35	6	35	5	29	0	0	17	100
All 4 or more admission cases	81	27	151	50	65	22	3	1	300	100

is more of a factor in both readmission groups, though it is still most frequent in the non-service-connected readmission group.

Principal Diagnosis vs. Alcoholism. This tabulation was made in an attempt to locate the alcoholics in relation to principal diagnostic category.

It will be noted that the alcoholics are spread fairly uniformly, but with some clustering in the personality disorder and neurosis groups.

Type of Ward to Which Admitted vs. Alcoholism. This comparison failed to show any notable relationships.

Race vs. Alcoholism. The proportion of Negro patients who were ever diagnosed alcoholic was smaller than the white in all categories: Of the single-admission controls, 11 per cent of the Negro patients were diagnosed alcoholic compared to 16 per cent of the whites; of the random controls, 5 per cent of the Negroes were diagnosed as alcoholic compared to 20 per cent of the whites; of the six-and-over admissions cases, 27 per cent of the Negro patients were diagnosed as alcoholic compared to 52 per cent of the whites.

Marital Status vs. Alcoholism. This again refers to the marital status at time of first admission.

Table 2. Diagnosis vs. Alcoholism (Primary and Secondary)

	Single Admission		Random		6+ Adm. Cases	
	Alcoholism	None	Alcoholism	None	Alcoholism	None
Manic-depressive						
Manic	0	0	0	2	0	0
Depressed	0	7	0	7	3	1
Schizophrenic						
Paranoid	0	7	0	11	7	18
Unclassified	0	7	0	11	4	5
Catatonic	0	1	0	5	1	0
Hebephrenic	0	0	0	2	0	2
Simple	0	2	1	2	1	2
Paranoid state	0	1	0	0	0	0
Neurosis	1	34	4	25	11	9
Personality disorder	1	15	0	15	10	3
Primary diagnosis of alcoholism	13	0	12	0	5	0
Organic brain syndrome	0	11	0	3	0	4
Total	15	85	17	83	42	44
	100		100		86	

Table 3. Marital Status vs. Alcoholism

	Controls					
	Single Admission		Random		6+ Adm. Cases	
	Alcoholism	None	Alcoholism	None	Alcoholism	None
Single	1	21	1	23	10	18
Married	11	58	14	52	15	20
Divorced	3	4	2	7	15	5
Widowed	0	2	0	1	2	1
Total	15	85	17	83	42	44

It will be noted that the proportion of alcoholism is higher in the divorced and single groups, when one considers the readmission cases. However, most of the alcoholics in the control groups are married. This suggests a possible difference in the attitudes or tolerance of spouses, but further study is needed.

Detailed Study of Most-Readmitted Cases

All the clinical and correspondence records were perused for the 17 patients who had had 10 or more admissions. For the sake of uniformity of conditions, only admissions to the writer's hospital were included. Attention was focused on the *decision to re-admit* in each instance, and several questions were applied to each instance of readmission: Did the patient come to an open or closed ward? Was the admission an "emergency," or did the patient come in from a waiting list? Was alcohol a factor? Did the former doctor or therapist intervene? Was the admission voluntary or forced?

The 17 patients had a total of 199 separate admissions to this hospital. Most of the findings are given in relation to this as a base.

Open vs. Closed Ward. There were 28 instances of admission to an open ward, and 171 admissions to a closed ward. Eight of the 17 patients had had closed ward admissions exclusively.

Emergency Admissions vs. Waiting List. There were 44 admissions from the waiting list and 155 instances of "emergency" admission. The latter group was made up mainly of admissions for violent behavior, delirium tremens, grossly disorderly intoxication, suicide attempts or threats and states of panic. Six of the 17 patients with 10 or more admissions had had emergency admissions exclusively.

Presence of Intoxication or Delirium Tremens at Admission. These figures are higher than given earlier, since they are obtained from physicians' and nurses' notes at the time of admission and not from final diagnoses. There were 118 positive instances, and only 81 instances of admission in which the use of alcohol was not involved. Three of the 17 patients showed some evidence of drinking at every admission.

Did Former Physician or Therapist Arrange Readmission? This was found to be so in 25 instances and not so in 174. All of the positive instances occurred in five of the 17 cases.

Were the Patients Committed? Admission was by way of commitment in only nine instances of the total of 199 admissions of the 17 patients studied here. However, seven of the 17 patients involved had been committed on at least one of their admissions.

Voluntary or Forced Admission. This was often difficult to establish, since patients were frequently grossly psychotic. There were only 17 instances in which the admission was clearly forced. In most of the other 182, the admission was voluntary, and often there was great pressure from the patient for readmission.

Irregular Discharges. The writer had been under the impression that these patients left by irregular discharge (against medical advice, AWOL, etc.) in a high percentage of instances. Surprisingly, the rates are low. Of the 199 admissions, only 28 were terminated by irregular discharges.

Service-Connected Status. Of these 17 patients, two were not service-connected, one was service-connected for old multiple gunshot wounds, one for chronic brain syndrome, one for a manic-depressive reaction, five for anxiety reactions, and seven for schizophrenic reactions.

Current Status. At the time of the study, three of these 17 patients were dead (one murdered, two dead of complications of alcoholism). One had evidently moved away some six years earlier. One had become ineligible for Veterans Administration care. Of the remaining 12, five were found to be in the hospital at the time of the study.

Time Spent on Hospital Rolls. Leaves and visits are counted as time in the hospital in this discussion. The 17 patients had been followed for an average of nine years, and during this period spent an average of 23 per cent of the time on the hospital rolls,

or less than a quarter of the time. The 199 admissions averaged 61 days in length. The length of hospitalization for individual patients ranged from 142 down to 17 days.

There are many patients who have spent more time in this hospital than this, and yet they have had only one to three separate admissions. This raises the posibility that this group of 17 patients is different not so much in admissions but in that they were *discharged* "too soon," so that they had to be readmitted later. If this is so, what is it that makes the hospital discharge them so quickly? It may be that they insist on leaving. However, since they seldom leave against medical advice, the staff must concur in the discharge. It appears that discharges are of the "poor prospects," the patients who do not inspire treatment efforts, because of their "records" of multiple hospitalizations, their alcoholism, their inability or unwillingness to "conform" to the hospital culture, and so on.

Summary

1. Statistical data were reviewed on all patients with four or more admissions to a Veterans Administration hospital psychiatric service, and were compared to the data of control groups; 4 per cent of all the individuals dealt with had had four or more admissions (up to 16).

2. As expected, the readmission group was found to have a higher proportion of alcoholism, a higher proportion of service-connected individuals, and a greater percentage of divorced and single men than the two control groups. Unexpectedly, however, there were found to be more schizophrenics (43 per cent) in the readmission group than in the controls (32 per cent). Other factors studied failed to distinguish the groups.

3. The patients with six or more admissions were studied further to determine the role of alcoholism. It was found that half of this group had had a diagnosis of alcoholism at some time. Most of the patients with a diagnosis of alcoholism carried a principal diagnosis of personality disorder or neurosis. There were relatively more alcoholics among white than among colored, in all groups. Among the readmission cases, the proportion of alcoholism was highest in the divorced and single groups.

4. The 17 cases who had had from 10 to 16 admissions were studied in detail, with focus on each decision to readmit. It was

found, in the 199 separate instances of admission, that most were to a closed ward, most were emergency admissions, and about two-thirds were accompanied by intoxication or delirium tremens. The former physician or therapist had arranged for readmission in one-seventh of the instances. Only one in 20 of the admissions was by commitment, and only one in 10 admissions was "forced." Three of the 17 patients are known to be dead. In spite of the many readmissions, these patients have averaged only 23 per cent of the time in the hospital. Thus these multiple readmission cases can also be viewed as the individuals who are discharged "too soon," so that they later have to be readmitted.

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