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READMISSIONS IN A GENERAL HOSPITAL PSYCHIATRIC UNIT— SOCIO-ECOMOMIC AND CLINICAL CORRELATES

SAVITA MALHOTRA[1],
R. SRINIVASA MURTHY[2],
V. K. VARMA[3],
A. GHOSH[4]
N. N. WIG[5]

The phenomenon of hospital readmissions of psychiatric patients has been a matter of concern ever since the concepts of 'deinstitutionalization' and 'community care' of these patients have been emphasised. There is evidence from the literature that readmission rate is increasing substantially (Rosenblatt and Mayer, 1974; Kirk and Therrien, 1975; Rollin, 1977). A number of investigators have studied relationships between psychiatric patient's characteristics and readmissions (Lorei, 1964; Buell and Anthony, 1973; Discipio and Sommer, 1973; Hogarty et al., 1974), in order to understand the phenomenon of readmissions. In general the findings have varied considerably. While the literature from the Western countries is extensive, there is no report from India on the problem of readmissions. It may be too presumptuous to believe that the similar socio-economic and clinical variables are operative in the Frequency and patterns of readmissions in India as are reported from the West.

AIMS

The present investigation was carried out with the objective of studying the socio-economic correlates and the reasons for admissions of readmitted patients as compared to the patients admitted for the first time in a general hospital setting.

MATERIAL AND METHODS

All the patients admitted to the psychiatry ward of PGIMER Chandigarh during the year 1977 including both the first admissions and readmissions to the same unit prior to the present (index) admission formed the study group. At the time of admission a form was filled up for all the admitted cases giving the reasons leading to admission and the problems in out-patient's management of each case. Information about the socioeconomic characteristics and diagonosis was taken from the case resources. Decision for discharge is taken by the consultant incharge of the case keeping in view its clinical condition, social functioning and also the purpose of admission.

Description of the Unit :

This inpatient unit is a part of the Nehru Hospital attached to the Postgraduate Institute of Medical Education and Research. It has 24 beds (22 general and 2 private) and is equipped with advanced biochemical, neurological and psychometric investigations facilities; draws patients from a wide catchment area; serves as a referral hospital for the region as well as treats patients coming directly to seek help. All admissions are voluntary. No patient is admitted under compulsory orders. It is an open ward with no provision for single cells or locked

[1] Lecturer,
[2] Assistant Professor,
[3] Associate Professor & Head
} Department of Psychiatry, Postgraduate Institute of Medical Education & Research, Chandigarh.
[4] Institute of Psychiatry, Maudsley Hospital, London
[5] Professor and Head, Department of Psychiatry, All-India Institute of Medical Science New Delhi.

rooms. All types of patients are admitted except those with legal involvement who are sent to the nearest mental hospital. At least one relative essentially stays indoors with the patient. Treatment team consists of 2 consultants, a senior reisident, 3-4 junior residents (postgraduate students), along with a qualified social worker, a clinical psychologist and trained psychiatric nurses. A wide variety of therapies are employed. Admission is made after detailed work up and discussion of the case with a consultant in the outpatient department and the authority to take the decision for admission lies only with the consultant and the senior resident. This unit caters to about 1,900 new cases and about 18,000 repeat visits each year.

RESULTS

Two hundred and sixty adults were admitted to the psychiatry ward during the study period, of which 52 cases had been admitted to the same unit earlier also which forms the "readmission" group for the present analysis.

First admissions (admitted for the first time)	..	.. = 208 (80%)
Readmissions	..	.. = 52 (20%)
Total ..	..	.. = 260

Of the readmissions, the number of earlier admissions is as follows :—

1	Previous admission	.. = 34
2	,, ,, ..	.. = 12
3	,, ,, ..	.. = 6

Comparison of 'First admissions' with Readmissions on socioeconomic and diagnostic variables

TABLE I.

	(N=208) First Admission	(N=52) Readmission
Age (in yrs.)		
15-44 ..	166*	33*
45 and above ..	42	19
Sex		
Male	100	28
Female ..	108	24
Marital status		
Never married ..	69	13
Ever married ..	139	39
Education		
Illiterate ..	112	32
Literate ..	96	20
Income (in Rs.) ..		
0—199 ..	170	42
200—599 ..	32	7
600 and above ..	6	3
Location		
Local	57	10
Outside ..	151	42
Family type		
Nuclear ..	112	27
Extended ..	29	9
Joint	55	11
Others ..	12	5

* $X^2=6.19$ ** $p=0.02$

Only significant difference being in the age factor that the readmission patients were more in the older age group.

TABLE II. *Diagnostic breakdown*

	(N=208) First Admission %	(N=52) Readmission %
Organic psychosis ..	8.75	3.85
Schizophrenia ..	32.69	26.92 } *
MDP	28.85	44.23 }
Reactive psychosis ..	5.77	4.69
Neurosis ..	16.35	13.66
Others	7.69	3.85

*$X^2=2.89$ d.f.=1, N.S.

Comparing the diagnoses, MDP group of patients forms the largest proportion of readmissions whereas schizophrenia is maximum in the first admission group. However, the difference is not statistically significant.

TABLE III. *Length of hospital stay*

	(N=028) First Admission	(N=52) Readmission
Less than 4 weeks ..	125	25
More than 4 weeks ..	83	27

$X^2=4.06$ d.f.=1 $p<0.05$

Forty eight per cent of readmitted cases are discharged within four weeks after admission, whereas 59 per cent of first admission cases also get discharged within the same time period. Readmitted cases have a longer hospital stay than the first admission cases.

TABLE IV. *Reasons for admission*

	First Admission (N=208) N	%	Re-admission (N=52) N	%	Total (N=260)
Acute disturbance	165	79.3	46	88.6	211
Differential diagnosis, detailed physical investigations or personality evaluation ..	116	55.7	8	15.3	124
Social Reasons ..	90	43.2	17	32.6	107
Special therapies ..	17	8.1	4	7.6	23
Academic interest	11	5.2	2	3.8	13
Not known ..	7	3.3	2	3.8	9

(Most of the cases had more than one reason for admission).

*$X^2=13.75$ d.f.=2 $p<0.01$

This table shows the reasons for admission in the two groups of patients. Admission for the treatment of acute disturbance is the commonest reason for both the groups of patients. In most of the readmission cases this acute disturbance is because of either the relapse or acute exacerbation of chronic illness which is difficult to manage at outpatients level because of its severity. Major difference in the two groups lies in the admission of cases with diagnostic difficulties where the purpose of hospitalization is to do the detailed evaluation and carry out the necessary physical and psychological investigations. Obviously such a problem is faced more in fresh admission than in readmission group. Social reasons like poor family support, problems of money and transport, adverse family influences needing temporary separation of the patient, were operative in 43.2 per cent and 32.6 per cent respectively, of the first admission and the readmission groups.

Table V indicates change of diagnoses of readmission. This is the final diagnosis which is arrived at after the detailed work up through ward observations, investigations, and the detailed discussion with the senior consultant. Change from schizophrenia to MDP and vice versa is seen equally commonly.

TABLE V. *Changr in diagnosis*

Total readmission —52

Change in readmission diagnosis —17

Previous diagnoses Diagnosis	No. =17	*Readmission diagnoses* Organic psychosis	Schizophrenia	MDP	Reactive psychosis	Neurosis
Organic psychosis ..	1	..	1	..	..	
Schizophrenia ..	9	..	4*	3	2	..
MDP	5	..	3	..	1	1
Reactive psychosis ..	1	..	..	..	..	1
Diagnoses deferred	1	1	..	..	..	..

*Change in subtype of schizophrenia.

DISCUSSION

The reported rates of readmission vary considerably in the literature. The department of Health and Social Security, U. K. (1976) in their report of inpatient statistics from the psychiatric hospitals and units gave a readmission rate of two-thirds of all admissions ; Kirk (1976) 71.1 per cent, Hogarty and Goldberg (1973) gave figures of 30 per cent of schizophrenics who continued on major tranquillisers after discharge, and 67 per cent of those on placebo were readmitted ; Ruskin and Dyson (1969) 30 per cent; Cody and Robinson (1977), reported 25 per cent as the readmission rate at their centre and 25-30 per cent in most other studies for schizophrenia in spite of the regular drug treatment. However, rate of 20 per cent in the present study is not very different though slightly lower. There is a possibility of these patients to be admitted to other psychiatric hospitals and units in the intervening period. There is a close liaison between our hospital and the nearest mental hospital (250 km away) and in our experience less than 5 per cent of our cases get admitted to other psychiatric facilities.

The body of literature on the predictors of readmissions is extensive and contradictory. However, the variables most consistently related to readmission are the patient's chronicity (Rosenblatt and Mayer, 1974; Fontana and Dowds, 1975) number of previous hospitalization (Arthur et al., 1968; Buell and Anthony, 1973; Lorei and Gurel, 1973; Rosenblatt and Mayer, 1974; Fontana and Dowds, 1975; Marks, 1977; Munley and Hyer, 1978), short length of hospital stay (Rosenblatt and Mayer, 1974; Fontana and Dowds, 1975; Hargreaves et al., 1977; Marks, 1977; De Francisco et al., 1980). Hogarty et al. (1974) in a well designed experimental study indicated that intensive after care service particularly use of medication can enhance social functioning and reduce recidivism whereas other studies (Brown et al., 1966; Franklin et al., 1975) found that the patients receiving community care have higher readmission rates.

The findings of the present study show that readmission in this general hospital psychiatric unit is not related to socio economic factors such as sex, martial status, education, income, location and family type (Table I) but readmission cases differ from first admission cases in terms of the reasons for admission. Readmission cases are more often MDP patients and are admitted for acute management whereas first admission cases are admitted for diagnostic difficulties (Table IV). The reasons being obvious that the problems of diagnosis are encountered more often in fresh cases whereas old cases for readmission need mainly the treatment. However, social reasons e.g. problems of money, transport, poor family support, adverse family influences, poor drug compliance etc. do not contribute much towards readmission. In our opinion this may be reflection of the general hospital service pattern rather than the lesser frequency of social problems in patients attending here. In another study (Malhotra et al., 1982) under publication, the authors have shown that the general hospital unit under discussion primarily admits patients for purposes of acute management and diagnostic difficulties. Therefore, social factors do not contribute much towards the readmission which is in contrast to the most other reports. Reasons for admission may also explain the longer hospitalization of readmission group (Table III) in that the time taken for the management of chronic and long-term patients in that group is longer in contrast to the first admission group where diagnostic evaluation can be done faster. Thus, it indicates that in our unit the patients are rehospitalised for acute exacerbation or relapse of symptoms and not for social reasons.

Another unintended observation of academic interest is that on readmission in about one-third of cases diagnosis changes (Table V) and the change is seen both ways

from schizophrenia to affective illness and vice versa. It may contribute towards understanding of phenomenology and the natural course of the psychiatric illnesses.

CONCLUSION

Readmissions in a general hospital psychiatric unit when compared with first admission cases do not differ on their socio-economic characteristics. However, the differences are seen in their diagnosis and reasons for admission. The implications are discussed.

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