Who sees a psychiatrist? A study of factors related to psychiatric referral in the general hospital

MICHAEL PRITCHARD
M.A., M.B., M.R.C.P., M.R.C.Psych.

*Department of Psychiatry,
The London Hospital Medical College, London, E.1*

Summary

A retrospective study was made of all patients admitted to the general wards of The London Hospital in 1968 who were coded on discharge as having a psychiatric diagnosis. Two hundred and fifty-two were selected as suitable for an investigation of factors associated with psychiatric referral. About one-third were seen by a psychiatrist and referral was found to be related to age, to type of psychiatric illness and the extent to which it was due to organic disease, to a suicidal attempt and to previous psychiatric contact. Referral rates also varied considerably between different medical consultants.

Introduction

Who ought to see a psychiatrist? It is almost 10 years since Kessel (1963) posed this question after finding in a general practice survey (Kessel, 1960) that only one in every ten patients considered suitable for referral was in fact seen by a psychiatrist. Furthermore, it did not appear that the selection of those referred was according to valid clinical criteria, which Kessel suggested should be, for neurotics, severity of illness and failure to respond to treatment. An even lower referral rate for psychiatric patients in general practice was found in a large scale investigation by Shepherd *et al.* (1966). What is the position in the general hospital? Which patients are seen by a psychiatrist? To answer these questions there have been a number of studies of both out-patient and in-patient psychiatric referrals. At the same time, other investigations have been made of the incidence of psychiatric disorders in general hospital populations. Comparing the figures from the two types of survey it appears that in the general hospital, as in general practice, there is a considerable discrepancy between the incidence of psychiatric disorders and the much lower rate of psychiatric referral (Mesey & Kellett, 1971). There is, of course, no reason to suppose that every patient with a psychiatric disorder in a general hospital should be seen by a psychiatrist but it is commonly held, at least by psychiatrists, that the

proportion referred is too small. In addition, since most of the high figures for psychiatric morbidity have come from surveys conducted by psychiatrists, it may be considered that the low referral rates reflect a failure of the non-psychiatrist to recognize psychiatric disturbance in his patients. However, assuming that a diagnosis of psychiatric disorder has been made, what are the factors that determine whether the patient is seen by a psychiatrist? Are they related to the patient, to the clinician, or to both?

Reasons given by non-psychiatric clinicians against referral to the psychiatrist have recently been studied by Mezey & Kellett (1971) using a questionnaire, and their findings will be discussed later. This paper considers some other factors which might be related to in-patient psychiatric referral. The opportunity for this was provided by a survey of all patients admitted to The London Hospital in 1968 who were coded on discharge as having a psychiatric diagnosis. This furnished a population defined as psychiatrically ill by non-psychiatrists and the findings in relation to psychiatric referral will be presented here.

Patients and methods

The notes of all patients coded as having a psychiatric diagnosis were studied, but a number have been excluded as being unsuitable for the present investigation of factors affecting referral to a psychiatrist after admission. Those excluded were thirty-one patients admitted for termination of pregnancy and/or sterilization for psychiatric reasons, fifteen transfers from psychiatric hospitals, six patients who were currently attending The London Hospital Psychiatric Department and one patient who died without regaining consciousness from a head injury considered to be suicidal.

The final sample consisted of 252 patients (123 male, 129 female) of whom eighty-two (32.5%) were referred to a psychiatrist. Fifteen patients were admitted more than once, bringing the total admissions to 275 for the 12-month period.

Information about each patient was recorded on punch cards and included the following data which will be considered in this study: sex; age; previous psychiatric experience; organic-psychiatric disease relationship; psychiatric diagnosis; attempted suicide; and consultant responsible for the patient.

Comparisons were made of referral rates in relation to each of these factors, and the significance of differences assessed by χ^2 .

Results

Sex

Almost exactly the same proportions of patients of each sex were seen by a psychiatrist; forty of 123 males (32.52%) and forty-two of 129 females (32.56%).

Age

Table 1 shows the mean ages and age distributions of referred and non-referred patients. The mean age of male patients who were referred was significantly less ($P<0.05$) than that of male patients who were not referred. The difference between means for female patients was in the same direction but did not reach statistical significance. The difference was, however, significant ($P<0.01$) for the total patient population.

The figures for the age distribution show that the lower mean age of male referred patients is consistent with their over-representation in the youngest age group ($\chi^2=10.470$, d.f.=1, $P<0.01$). The referral rate for middle-aged males (40–49 years) was significantly lower than that for the rest of the males ($\chi^2=5.620$, d.f.=1, $P<0.025$), so that the age distribution of referral rates for this sex tends to be U-shaped. For female patients there was also a significantly

different age distribution ($P<0.05$) for the referred and non-referred patients, but this was due to the low rate of referral for patients aged 60 years or over ($\chi^2=5.999$, d.f.=1, $P<0.025$). Taking the total population, the referral rate was significantly higher ($\chi^2=7.510$, d.f.=1, $P<0.01$) for the younger, and lower ($\chi^2=5.423$, d.f.=1, $P<0.025$) for the elderly.

A partial explanation of these age differences in referral rate is found in the diagnostic distribution between age groups (Table 2). Thus, the high referral rate for the younger aged males is largely due to the high proportion of referrals (83.3%) for patients with personality disorder in this age range for which this was also the commonest (28.0%) diagnosis. Exclusion of all male patients with personality disorder reduced the referral rate for the three increasing age ranges to 38.7, 14.6 and 24.2%, respectively. The age distributions of referred and non-referred patients were then no longer significantly different although almost so ($\chi^2=5.499$, d.f.=2), but the referral rate for the younger patients remained significantly higher than that for the rest ($\chi^2=4.593$, d.f.=1, $P<0.05$).

Examination of the middle-aged men showed that their low referral rate was due to the fact that there were no referrals amongst patients with the two commonest diagnoses—anxiety state and alcoholism—which together accounted for 50% of the group (23.9 and 26.1%, respectively). Exclusion of all male patients with anxiety states and alcoholism resulted in age distributions of referral rates of 51.2, 25.7, 31.0% and 55.6, 26.5, 31.2%, respectively. In both cases these exclusions removed the significant difference between referral rates for the middle-aged and other male patients (anxiety state excluded, $\chi^2=2.937$, d.f.=1; alcoholism excluded, $\chi^2=3.320$,

TABLE 1. Mean age and age distribution of referred and non-referred patients

	Mean age			Age distribution				Chi-square
	Mean	SD	't' test	10–39	40–59	60–	Total	
Males								
Referred	42.5	18.6		22	9	9	40	
Not referred	49.8	16.2	2.250	21	37	25	83	10.895
Total	47.4	17.3	$P<0.05$	43	46	34	123	$P<0.01$
% referred				51.2*	19.6+	26.5	32.5	
Females								
Referred	42.6	15.1		16	22	4	42	
Not referred	48.5	19.1	1.748	28	34	25	87	6.095
Total	46.6	18.1	NS	44	56	29	129	$P<0.05$
% referred				36.4	39.3	13.8+	32.6	
Total								
Referred	42.5	16.8		38	31	13	82	
Not referred	49.1	17.7	2.821	49	71	50	170	9.199
Total	47.0	17.7	$P<0.01$	87	102	63	252	$P<0.025$
% referred				43.7*	30.4	20.6+	32.5	

Significance of difference between referred rate for age group compared with the remainder. *, $P<0.01$; †, $P<0.025$.

TABLE 2. Male and female referral rates for diagnostic categories in each age range

Code diagnosis	Male						Female									
	10-39		40-59		60-		Total		10-39		40-59		60-		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
300-3 Functional psychoses	2	50.0	1	0	5	60.0	8	50.0	1	100.0	2	50.0	1	100.0	4	75.0
304-9 Organic psychoses	1	0	8	25.0	12	25.0	21	23.8	1	100.0	3	33.3	14	0	18	11.1
310 Anxiety states	2	50.0	11	0	5	0	18	5.6	6	16.6	13	23.1	6	16.6	25	20.0
311 Hysterical reactions	5	60.0	4	25.0	2	0	11	36.4	11	36.4	10	20.0	3	0	24	25.0
314 Neurotic depression	6	50.0	4	50.0	3	66.6	13	53.8	4	75.0	10	70.0	4	50.0	18	66.7
313, 315-8 Other neuroses	0	—	2	0	0	—	2	50.0	4	0	9	33.3	2	0	15	20.0
320-1 Personality disorder	12	83.3	5	60.0	1	100.0	18	77.8	10	40.0	6	50.0	1	100.0	17	47.1
322 Alcoholism	7	28.6	12	0	6	0	25	8.0	2	0	4	50.0	0	—	6	33.3
323 Drug addiction	8	12.5	4	25.0	0	—	12	16.7	6	33.3	3	33.3	1	0	10	30.0

d.f.=1) though, due to the remaining high referral rates for the younger group of male patients, the overall distribution between referred and non-referred patients remained significantly different with alcoholism excluded ($\chi^2=6.957$, d.f.=2, $P<0.05$) and very nearly so with anxiety state excluded ($\chi^2=5.901$, d.f.=2). If, however, patients with anxiety state and those with alcoholism were both excluded, the age distribution of referral rates was 55.9, 39.1 and 39.1%, and there was no significant difference of age distributions between referred and non-referred patients ($\chi^2=2.207$, d.f.=2). Turning to female patients, the lower rate of referral for the elderly was found to be due to the fact that none of the patients with an organic psychiatric disorder was referred and that this diagnosis was made in 48.3% of this age group. Excluding all such patients gave an age distribution of referral rates of 34.9, 39.6 and 26.7% with no significant difference between the age distributions of referred and non-referred patients ($\chi^2=0.892$, d.f.=2) nor between the referral rates of the elderly and the remainder ($\chi^2=0.6605$, d.f.=1).

As far as the combined sexes is concerned, excluding anxiety state and alcoholism still leaves a significant difference in age distributions of referred and non-referred patients ($\chi^2=6.867$, d.f.=2, $P<0.05$, and $\chi^2=8.013$, d.f.=2, $P<0.025$, respectively), but if the two diagnoses are combined the difference is no longer significant, though almost so ($\chi^2=5.913$, d.f.=2). Exclusion of both personality disorder and organic states also removes the significant differences ($\chi^2=4.331$, d.f.=2 and $=4.451$, d.f.=2, respectively).

As well as diagnostic categories, however, there is another, though related, factor which must be considered in relation to the age distribution of referrals. Attempted suicides had the highest referral rate of all patients, and excluding them results in the follow-

ing age distributions of referral rates for males, females, and total, respectively: 36.0, 17.5, 19.4%; 27.8, 32.7, 13.8%; and 31.1, 25.8, 16.7%. In each case the age distributions of referred and non-referred patients are not significantly different ($\chi^2=3.309$, 3.400 and 3.501, respectively, all with d.f.=2).

Previous psychiatric experience

Table 3 shows that for both sexes there is a lower referral rate for patients who have had previous psychiatric contact either with The London Hospital or elsewhere. The differences are not statistically significant though for female patients with previous contact with a psychiatrist at The London Hospital the difference approaches significance at the 0.05 level of probability ($\chi=3.814$, d.f.=1). However, taking patients of both sexes who had attempted suicide the referral rate was significantly lower for those with any previous psychiatric contact than for those without (57.1 and 85.7% respectively: $\chi^2=4.200$, d.f.=1, $P<0.05$).

Relationship between organic and psychiatric disorder

Each patient was allotted by the author to one of five categories and these are set out in Table 4, together with the referral rate for each. An example of a patient in category 1 would be an alcoholic admitted with a haematemesis, or a patient with a personality disorder admitted following an overdose. The distinction between categories 3 and 4 was sometimes rather arbitrary but examples of the latter would be a patient with ischaemic heart disease and a secondary anxiety state, or an epileptic with a personality disorder. Examples of patients in category 3 where the organic and psychiatric disorder were thought to be unrelated, would be a chronic schizophrenic with ankylosing spondylitis, or pyelitis

TABLE 3. Effect of previous psychiatric contact at The London Hospital (LH), elsewhere, or either, on referral rates

	Male						Female						Total					
	LH		Other		Either		LH		Other		Either		LH		Other		Either	
	No	PH	No	PH	No	PH	No	PH	No	PH	No	PH	No	PH	No	PH	No	PH
	PH	PH	PH	PH	PH	PH	PH	PH	PH	PH	PH	PH	PH	PH	PH	PH	PH	PH
Referred	6	34	9	31	13	27	3	39	10	32	11	31	9	73	19	63	24	58
Not referred	13	70	28	55	31	52	18	69	24	63	36	51	31	139	52	118	67	103
Total	19	104	37	86	44	79	21	108	34	95	47	82	40	212	71	181	91	161
% referred	31.6	32.7	24.3	36.0	29.5	34.2	14.3	36.1	29.4	33.7	23.4	37.8	22.5	34.4	26.8	34.8	26.4	36.0

TABLE 4. Relationship between organic and psychiatric disorder expressed as five categories with referral rates for each

Relationship between organic and psychiatric disorder		Referred	Not referred	Total	% referred
(1)	Primary psychiatric disorder with or without secondary organic complications	30	38	68	44.1
(2)	Somatic symptoms without organic disease	23	43	66	34.8
(3)	Psychiatric disease with unrelated organic disorder	8	20	28	28.6
(4)	Organic disease with related psychiatric disorder	13	38	51	25.5
(5)	Organic psychiatric disorder	8	31	39	20.5
Total		82	170	252	32.5

$\chi^2=8.238$, d.f.=4, NS. With 3 and 4 combined $\chi^2=8.1596$, d.f.=3, $P<0.05$.

in a patient with a personality disorder. Category 5, the organic psychiatric disorders, includes both acute and chronic. It can be seen that the referral rate shows a progressive decline with increasing organic involvement in the psychiatric condition. The difference between the categorical distributions of the referred and non-referred patients fails, however, to reach statistical significance ($\chi^2=9.238$, d.f.=4) unless categories 3 and 4 are combined ($\chi^2=8.160$, d.f.=3, $P<0.05$). Excluding patients with attempted suicide considerably reduces the referral rate for category 1, but leaves the same pattern of reducing referral rates across categories 2-5 (20, 31.7, 29.6, 21.3 and 18.4%, respectively).

Psychiatric diagnosis

The referral rate for each psychiatric diagnosis as coded is shown in Table 5. Six patients were coded as 318.6 (attempted suicide) only and these have been excluded (all six were referred). The first two columns refer to numbers of each diagnosis made and since a small number of patients (nineteen) was given two diagnoses, there is some overlap and the totals would exceed the actual number of patients. The third and fourth columns deal with patients who have been given only one psychiatric diagnosis. Significant differences in referral rate for each diagnosis are indicated and the diagnostic distributions of referred and non-referred patients, as shown in column

three, are significantly different ($\chi^2=46.853$, d.f.=8, $P<0.001$). Columns two and four show that the differences in referral rate persist even if patients who attempted suicide are excluded, though with the smaller numbers, χ^2 is sometimes no longer applicable where indicated in the Table, nor is it to the diagnostic distributions of referred and non-referred patients with single diagnoses.

Attempted suicide

Forty-two of the 252 patients had made a suicide attempt. Of these, thirty (71.3%) were referred as against fifty-two of the remaining 210 (24.8%)—a highly significant difference ($\chi^2=34.723$, d.f.=1, $P<0.001$).

Consultant/speciality

Table 6 shows the distribution of psychiatric morbidity and referral rates between consultants and specialties. The chief interest lies in the differences between the general medical consultants. Each letter represents an individual consultant, except for one which refers to the medical unit where, although more than one consultant was involved, they were not identified in the hospital statistics of total admissions. It can be seen that there was a variation in referral rate between consultants and that the range was even greater if attempted suicides were excluded (probably thereby bringing out differences

TABLE 5. Referral rates for each diagnostic category including and excluding attempted suicides and multiple diagnoses

Code	Diagnosis	Total								Single diagnoses							
		Incl. att. suicides				Excl. att. suicides				Incl. att. suicides*				Excl. att. suicides			
		Ref.	Not ref.	Total	% ref.	Ref.	Not ref.	Total	% ref.	Ref.	Not ref.	Total	% ref.	Ref.	Not ref.	Total	% ref.
300-3	Functional psychoses	7	5	12	58.3	5	5	10	50.0	6	4	10	60.0	4	4	8	50.0
304-9	Organic psychoses	7	32	39	17.9†	7	32	39	17.9	7	30	37	18.9	7	30	37	18.9
310	Anxiety state	6	37	43	14.0‡	6	37	43	14.0	2	34	36	5.6¶	2	34	36	5.6‡
311	Hysterical reaction	10	25	35	28.6	8	25	33	24.2	9	24	33	27.3	7	24	31	22.6
314	Neurotic depression	19	12	31	61.3¶	11	10	21	52.4‡	14	8	22	63.6¶	8	7	15	53.3**
313, 315-8	Other neuroses	4	13	17	23.5	4	13	17	23.5	3	12	15	20.0	3	12	15	20.0
320-1	Personality disorder	22	13	35	62.9¶	10	9	19	52.6**	19	12	31	61.3¶	9	8	17	52.9**
322	Alcoholism	4	27	31	12.9§	3	23	26	11.5	4	22	26	15.6	3	19	22	13.6
323	Drug addiction	5	17	22	22.7	4	14	18	22.2	4	13	17	23.5	3	10	13	23.1
	Total	82	170	252	32.5	52	158	210	24.8	68	159	227	30.0	46	148	194	23.7

* Difference between distribution of referred and non-referred patients, $\chi^2=46.853$, d.f.=8, $P<0.001$.
Significance of difference between referral rate for diagnostic category compared with the remainder

† $P<0.05$.

§ $P<0.025$.

‡ $P<0.01$.

¶ $P<0.001$.

**Significance expected but numbers too small.

TABLE 6. Distribution between consultants/specialties of total admissions, numbers and percentages of patients with psychiatric diagnoses and their referral rates including and excluding attempted suicides, and percentages of referred patients seen by a senior psychiatrist

	Total admissions excluding psychiatric patients excluded from study	Patients with psychiatric diagnosis		Patients with psychiatric diagnosis referred			Patients with psychiatric diagnosis excluding att. suicides		Patients with psychiatric diagnosis excluding att. suicides referred		Referred patients seen by senior psychiatrist	
		No.	% total	No.	% total	% psych. pts	No.	% total excl. att. suicides	No.	% psych. patients excl. att. suicides	No.	%
General medical												
A	311	21	6.75	9	2.89	42.9	12	3.97	2	16.7	33.3	
B	412	19	4.61	7	1.70	36.8	13	3.20	2	15.4	42.9	
C	279	16	5.74	5	1.79	31.3	14	5.05	3	21.4	60.0	
D	447	30	6.71	9	2.01	30.0	27	6.08	7	25.9	33.3	
E	286	24	8.39	12	4.20	50.0	18	6.43	9	50.0	83.3	
F	320	19	5.94	5	1.56	26.3	16	5.05	3	18.8	0	
G	315	7	2.22	2	0.63	28.6	6	1.91	1	16.7	0	
H	1012	36	3.56	16	1.58	44.4	27	2.69	10	37.0	62.5	
Total	3382	172	5.09	65	1.92	37.8	133	3.98	37	27.8	49.2	
Neurological	449	36	8.02	8	1.78	22.2	34	7.61	6	17.6	75.0	
Other medical specialties	956	10	1.05	2	0.21	20.0	10	1.05	2	20.0	50.0	
Surgical and gynaecological	9257	34	0.37	7	0.08	20.6	33	0.36	7	21.2	42.8	

TABLE 7. Spearman's rho rank order correlations between distributions amongst general medical consultants of the variables considered in Table 6

	1	2	3	4	5	6	7
1. No. of total admissions							
2. No. psychiatric patients	0.542						
3. No. psychiatric patients excluding attempted suicides	0.470	0.810*					
4. Psychiatric patients as % of total admissions	-0.381	0.387	0.268				
5. Psychiatric patients excluding attempted suicides as % of total admissions	-0.381	0.292	0.494	0.833*			
6. % psychiatric patients referred	-0.095	0.577	0.268	0.333	0.167		
7. % psychiatric patients excluding attempted suicides referred	0.018	0.643	0.822	0.363	0.566	0.435	
8. % referrals seen by senior psychiatrist	-0.119	0.500	0.488	0.238	0.357	0.869†	0.625

* $P < 0.02$.

† $P < 0.01$.

of referral practice). Although in neither case did the difference between the consultant distributions of referred and non-referred patients reach statistical significance, it seemed justifiable to compare the rank orders of the referral rates with those of certain other variables and these relationships are set out in Table 7 in the form of Spearman's rho's.

Correlations which are of particular interest are (a) between numbers of patients with psychiatric disorder including, and excluding, attempted suicide (0.810—significant at the 0.02 level of probability), and a similar correlation using percentages of total admissions (0.833—also significant at the 0.02 level of probability), showing that exclusion of attempted suicide, although increasing the range of referral rates has little effect on their rank order; (b) between the numbers of patients with psychiatric disorder and their referral rates (0.577) and the same comparison with attempted suicides excluded (0.822), this latter being significant at the 0.02 level of probability; (c) the smaller but still positive correlation between patients with psychiatric disorder as percentages of total admissions and referral rates with and without attempted suicides (0.333 and 0.566, respectively); (d) the negative correlation between the total number of admissions and the proportion of these with psychiatric disorder (-0.381) which accounts for the lower correlations in (c); (e) the positive correlations between the percentages of referred patients seen by a psychiatrist of consultant or medical assistant status, and the referral rates including and excluding attempted suicide, the former (0.869) being significant at the 0.01 level of probability.

Discussion

Before discussing the findings, two aspects of methodology must be mentioned. The first concerns the psychiatric diagnosis used, which was that coded for each patient on discharge. When patients had been seen by a psychiatrist there was occasionally some discrepancy between the coded diagnosis and that contained in the report written in the notes by the psychiatrist, e.g. coded 'hysterical reaction' but described by the psychiatrist as 'personality dis-

order'. However, such differences were usually not gross and, as with the above example, simply reflected a difference in emphasis on certain aspects of a given case. Since the main concern of the study was to consider psychiatric illness from the point of view of the non-psychiatric clinician, it was decided to use the coded diagnosis in all cases.

The second point that should be made is that the figure for the overall rate of referral to a psychiatrist within the hospital is, to an appreciable but unknown degree, an underestimate. Unfortunately, it was not possible to ascertain the total number of psychiatric referrals for the year in question, but it is probable that a proportion was of patients who were not given a formal psychiatric diagnosis and therefore, did not appear in this series. It must be emphasized, therefore, that the present study is restricted to referrals of patients who were so diagnosed.

Within this limitation, however, the findings provide some answer to the questions posed at the beginning of the paper. A psychiatric disorder having been recognized in a patient, the likelihood of referral to a psychiatrist is seen to be affected by factors related to both patient and physician.

As was expected, patients who made a suicidal attempt had the highest referral rate (71.4%) of any category considered in the study. This figure agrees with the proportion of referrals (73.3%) in a previous study of attempted suicides admitted to The London Hospital in 1966 (Pritchard, 1968). Those attempted suicides who were not seen by a psychiatrist were significantly more likely to have had previous psychiatric contact than were those who were referred. It may be that in the light of the earlier assessment it was decided that the suicide risk was negligible and that another psychiatric referral was not required.

The high referral rate for attempted suicides had to be taken into account when considering other factors, and it was for this reason necessary to see the effect on the various comparisons, of excluding them.

Regarding the effect of age on referral rate, such

differences as were found proved to be largely, though not entirely, due to differences in age distribution of certain diagnostic categories, and even more so, of attempted suicides. These in turn were related to each other so that, for example, the lower referral rate of elderly female patients was due to the large proportion with organic psychiatric disorders amongst whom there were no attempted suicides and no referrals. Similarly, for the younger male patients there was a high referral rate, due largely to the 28% with personality disorders, of whom half had attempted suicide and 83.3% were referred. For the forty-six middle-aged patients on the other hand, the referral rate was low due to the eleven with anxiety states, none of whom attempted suicide or were referred, and the twelve alcoholics of whom only two attempted suicide and none was referred. Exclusion of these various diagnostic categories reduced the differences of referral rate between the particular age ranges and the rest to a non-significant level while exclusion of attempted suicides had the greatest overall effect in this respect.

A history of previous psychiatric contact was examined, since it seemed possible that such experience, especially if at the same hospital, might be considered to reduce the need for referral if the earlier psychiatric assessment was available and thought to be adequate for dealing with the present admission. This view was supported by the findings of lower referral rates for patients with previous psychiatric contact, though this only approached statistical significance for female patients who had been seen by a psychiatrist at The London Hospital.

Categorizing patients according to the relationship between their psychiatric disorder and any organic illness showed that the more that organic disease was responsible for the psychiatric disturbance, the less likely was the patient to be referred to a psychiatrist.

Where individual psychiatric diagnoses were concerned the differences in referral rate were striking. High rates were found for the functional psychoses (schizophrenia, manic depressive reaction, involutional melancholia, paranoia and paranoid states), reactive depression and personality disorder, and low rates for organic disorders, anxiety state and alcoholism. Although differences in proportions of attempted suicides between diagnostic categories contributed to these differences in referral rate, the latter remained even if such patients were excluded.

In fact, the variation in referral rates for different diagnoses appears to be generally meaningful and often predictable. Thus, a high rate would be expected for the functional psychoses because of their severity, for neurotic depression because of the actual or potential risk of suicide attempts, and for personality disorders because of the high incidence

of attempted suicide and liability to unco-operative and generally disturbing behaviour, especially in male patients (in fact there was a higher, though not statistically significantly higher, referral rate for males than females, 77.8 and 47.1% respectively). A low referral rate for organic psychiatric disorders would be expected due to the fact that management of the acute conditions, confusional states, depends primarily upon treatment of the organic illness, whilst the chronic states or dementias are essentially untreatable (though a psychiatrist may be asked for assistance in arranging long-term care). Part of the explanation for the low rate of referral of patients with anxiety states is that in about half the cases the anxiety could be regarded as secondary to some organic illness, twenty-three out of the total forty-three falling into category 4 of Table 4 (i.e. organic diseases with related psychiatric disorder). However, most of the remainder (seventeen) were in category 2 (somatic symptoms without organic disease) and rather surprisingly only 3% of these were referred so that it appears that patients with anxiety states are not often regarded by the non-psychiatrist as requiring specialist assessment or treatment. One obvious reason for this may be the ease with which tranquillizers may be prescribed for anxiety, and indeed eighteen of the patients with anxiety state were recorded as receiving a psychotropic drug. The small proportion of alcoholics who were referred is perhaps surprising, but one possibility is that it reflects an unwillingness on the part of the alcoholic patient to accept the need for help and therefore of referral to a psychiatrist (in the study of Mezey & Kellett [1971] the commonest general reason against referral was the patient's dislike of being referred to a psychiatrist).

In general, then, it may be concluded from these findings, that the decision to refer to a psychiatrist a patient who was recognized to be psychiatrically ill, was not a matter of chance but was influenced by identifiable and valid factors related to the patient and the illness. However, the results also demonstrate that there are considerable differences between physicians in their use of psychiatric referral and that these differences may be correlated with differences in certain other variables. Thus, the more patients the physician diagnosed as psychiatrically ill, the more he referred to a psychiatrist and the more he was likely to request a senior psychiatrist—usually a particular individual. An obvious interpretation is that these three variables are all measures of the degree of psychiatric orientation of the physician and/or his relationship with the Psychiatric Department. Mezey & Kellett (1971) in their study found that in two hospitals out of six, 'the relationship between the psychiatrist and the other specialties was such as to prevent referrals'. In the present study it is of interest that the two units with the

highest referral rates (E and H) were the two which at that time held joint undergraduate teaching sessions with a psychiatrist. Macleod & Walton (1968) have drawn attention to the value of such liaison.

It was not the purpose of this paper to make a comparison of the present series of psychiatric referrals with those of other studies, but it is hoped to report this in a separate publication. As far as The London Hospital is concerned, it is encouraging to find that the decision as to whether a patient, having been recognized as psychiatrically ill, is referred to a psychiatrist is influenced by generally meaningful criteria such as age, the type of illness and the extent to which it is related to organic disease, whether the patient has made a suicidal attempt or whether he has previously been seen by a psychiatrist. On the other hand, it also appears that a patient may be more likely to be recognized as psychiatrically ill and if so, to be referred to a psychiatrist, if admitted under the care of some general medical consultants than others.

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