

LIAISON PSYCHIATRY IN GENERAL HOSPITALS

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Rapid growth of general hospital psychiatric units all over the world has provided impetus to consultation-liaison work carried out by the psychiatrists in the non-psychiatric departments of general hospitals. Liaison psychiatry has acquired the status of a subspecialty within psychiatry and its development has paralleled the shift of psychiatry from mental hospitals to general hospital setting. This has resulted in closer links between physical and psychological medicine and provides opportunity to the psychiatrists to be directly involved in the care of the physically ill. The area thus covers the fields of psychosomatic medicine; stress and the precipitation/perpetuation of illnesses; psychological consequences/concomitants of physical illnesses; and the problems relating to the patient's families and health care professionals in their management.

"Consultation" refers largely to the services performed for the physically ill patients and families, often at the bedside in the general hospital, upon the referral of the attending physician or other health professional. "Liaison" refers to the services provided for the physician and staff, trying together the treatment of the patient and family using educational conferences, psychosocial teaching rounds and holistic treatment plans.

There is ample evidence based on epidemiological data that positive correlation exists between physical and psychiatric disorders. According to

Lipowski (1975), "Physical illness is a major cause of psychiatric morbidity." Lipowski (1967) in his review of the general hospital population surveys reports that 30-60 per cent of inpatients and 50-60 per cent of outpatients suffer from psychic distress or disorder of sufficient severity to create a problem for the health professionals.

Eastwood and Trevelyn (1972) in a comparative study on persons registered with London group practice found that psychiatrically ill persons had a significantly greater prevalence of physical diseases of all kinds. Rosen *et al.* (1972) in his study, on patients seen in several general medical clinics in Monroe country New York found that emotional disorder was diagnosed in 9%-23% of patients in the various groups of somatic diagnoses. Incidence of depression in medical inpatients has been variously reported to be 20 per cent (Schwab *et al.*, 1967); 64 per cent of hospitalized cardiac patients (Dovenmuhle and Verwoerd, 1962); 20 per cent of severely ill medical patients (Stewart *et al.* 1965); 29 per cent patients hospitalized for acute myocardial infarction (Stern, 1974).

Similarly in psychiatric population higher incidence of organic diseases has been reported. The figures are 50 per cent by Koranyl (1972); 33.5 per cent by Maguire and Granville Grossman (1968). Half of these were not diagnosed prior to psychiatric referral. In addition, there are a large number of

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specific organic disorders in which a higher than expected incidence of psychiatric disorders has been found.

These facts and figures, undoubtedly speak for the need, the importance and the scope of consultation liaison work. Apart from positive impact on the quality of patient care there are important teaching and research implications.

I would now like to examine the quality and the nature of liaison work.

REFERRAL RATES

Although there is a convincing evidence of an increased association between physical and psychiatric morbidity the referral rates are much lower than the reported prevalence of psychiatric morbidity

Referral rates of general hospital inpatients (percentage)

United States

6.9	Meyer and Mendelson (1960)
9.13	Kornfeld and Feldman (1965)
2.2	Eilenberg (1965)
0.5	Kearne (1966)
3.4	Shevitz <i>et al.</i> (1976)
6.9	Edwards and Angus (1968)
10.0	Hackett (1978)

India

0.66	Parekh <i>et al.</i> (1968)
1.4	Prabhakaran (1968)
1.17	Wig and Shah (1973)

U. K.

1.3	Shepherd <i>et al.</i> (1960)
0.7	Fleminger and Mallett (1962)
2.8	Bridges <i>et al.</i> (1966)
1.6	Macleod and Walton (1969)
1.4	Anstee (1972)

Only 20 per cent of patients having psychiatric problems are referred for psychiatric help and about 80 per cent are not. The rates are higher in the United States than in U. K., Indian

figures are comparable to British figures. In trying to determine the factors for such a low referral one is inclined to consider:—

1. Whether it is the low opinion which other specialists hold of the psychiatrists and of the service provided by them? Psychiatrists have been criticised for being remote in thought, who tend to express opinions in a style which alienates physicians. Moreover psychiatrists tended to isolate themselves from the rest of the medical community, failed to keep abreast of general medicine and tended to lose their identity as physicians.

2. Whether it is that the physicians and surgeons are able to successfully treat their patient's psychiatric problems and hence do not need psychiatric referral? This statement does not seem very true because there are various studies to show that a large amount of psychiatric morbidity goes undetected and undiagnosed on the general medical wards (especially so if the psychiatric problem is nondisruptive and unobtrusive (Maguire *et al.*, 1974; Mofic and Paykel, 1975; Denny *et al.*, 1966; Knights and Folstein, 1977). Joint meetings and teaching sessions have been suggested to create awareness in the medical colleagues and to increase the referral rates. In a study by Torem *et al.* (1979) the use of an 'active' liaison approach increased the referral rate from 2% to 20%.

On a closer examination of the consultation-liaison work, 3 aspects of the process become evident:

1. Patient-centred problems—here the patient is the primary focus of the consultant's interest where immediate goal is the diagnostic evaluation and therapeutic recommendation.

2. Consultee-centred problems—Here primary focus is the consultee's difficulties and expectations.

3. Situation-centred problems—where it mainly centres around the interpersonal difficulties e. g. uncooperative patient, hostile reactions, patient who refuses treatment etc.

These three aspects are not mutually exclusive, but one may predominate at one time. The importance lies in being aware of the central problem and providing help in the desired manner. Then there are three phases of the consultation process:

1. Reception of a request for consultation.
2. Gathering of information.
3. Communication of findings, opinion and advice.

Request for consultation most traditionally is made by sending a standard slip or a verbal request. It is important to note how the message is worded. It generally reflects the nature of problem and the help that is expected. Consultation process should be geared towards it. In many situations a meeting with the referring Consultant clarifies the situation.

Another important aspect is whether the patient knows that a psychiatrist has been called to see him. Although it is always necessary to do so and is generally done in the west, in our experience about 80 per cent of the times the patient is not informed. He is taken by surprise at the arrival of the psychiatrist and often the psychiatrist has to explain the reasons for his presence. This makes the task of the psychiatric evaluation more difficult.

Information is gathered from multiple sources including the case notes, nursing, report treatment and investigation charts; the resident incharge of the case; the patients relatives and the patient himself.

Finally the communication of results which should satisfy the following four criteria according to Lipowski (1975)—the answer to the consultation should be

relevant, should have explanatory value, intelligibility and practicability.

ORGANIZATIONAL ASPECTS

Liaison psychiatry has flourished more vigorously in the United States of America than elsewhere. According to Lipowski, psychosomatic medicine had made a spectacular comeback after facing extinction for almost two decades and the current resurgence of interest is largely an American phenomenon.

The term "psychiatric liaison" made its first appearance in 1930's to describe the department as Colorado General Hospital, Denver. Subsequently several American Hospitals established similar units. Recent expansion has received much support from National Institute of Mental Health. At present in the United States, liaison services range from large units which provide consultants to each medical speciality, to a one-man unit in which one psychiatrist serves as a consultant to all departments.

Liaison psychiatry has attracted much less interest in Britain for various reasons. Generally Liaison psychiatry is not a full time assignment. In India as well there are no full time liaison psychiatrists and not so well organised liaison services exist in most of the teaching centres.

The Department of Psychiatry at PGI takes pride in providing systematic exposure to consultation-liaison work to all the post-graduate trainees. Each junior resident during his MD training in psychiatry gets a full time rotational posting for 3 months where he attends to all the inpatient referrals under the supervision of consultant. Apart from that there are weekly psychosomatic case conferences in rotation with the departments of Internal Medicine, General Surgery, Neurology and Paediatrics attended by the joint faculty and the residents.

Ideally, "a consultation service should be a close-knit organised unit consisting of at least some full time psychiatrists who at the same time are members of the medical team in close daily contact with it and with the medical wards" (Lipowski, 1967).

A study was carried out at the psychiatry department of the PGIMER, Chandigarh, with the following aims:

1. To determine the patterns and the 'dynamics' of the psychiatric referral process in the available setting ?
2. To determine how successful the intervention is ?
3. And to determine the common grounds on which nonpsychiatric physicians and psychiatrists most frequently come face to face?

METHODOLOGY

The study was conducted within the existing framework of referral service. All the referral slips are received in a centralised place where the junior resident on referral posting checks from time to time. He attends to the calls immediately or within the next 24 hours depending upon the urgency indicated on the referral slip. He makes a detailed evaluation of the case and then takes a consultant to the bedside of the patient. Treatment plan is formulated after discussion.

All the cases referred during one year (1978-79) were taken for the study. The author was the consultant incharge of the referral service during that period and saw all the patients.

An especially designed proforma was used for data collection of the following variables:-Age, Sex, Source of referral, consultant incharge of the referring unit, urgency of consultation, physical diagnosis, reason which prompted the referral, purpose for which it was referred, psychiatric diagnosis, treatment advised, mode of disposal, length of follow up

and psychiatric treatment necessary after discharge. Follow up visits were made to evaluate the usefulness of psychiatric consultations and the degree of compliance with advice. Information was gathered from the referral note, patient's case notes, discussion with the resident incharge of the case and at times the consultants or the staff nurse.

RESULTS AND DISCUSSION

A total of 336 patients were seen during one year of study period. It formed about 1.48 per cent of the total admissions to the hospital during that period.

TABLE I

<i>Urgency of consultation</i>	No.	Percentage
Immediate	1	0.30
Urgent	111	33.03
Routine	192	57.14
Not mentioned	32	9.52
<i>Source of referral</i>		
Medicine and Allied specialities	195	58.03
Surgery and Allied	105	31.25
Obst. and Gynae	23	6.84
Others	13	3.87

About 33 per cent of referrals were marked as "urgent" whereas in 57 per cent the request was to be attended sometime during next 24 hours. Largest majority of patients were referred from medicine and allied specialities.

This table gives the most prominent reasons for referral to mean what prompted psychiatric referral or why was it though necessary that consultation be requested.

TABLE II

<i>Reasons for referral (WHY)</i>	No.	Percentage
1 Mental symptoms co-existing with physical problems	95	28.27
2 Abnormal behaviour	74	22.02
3 Organic illness insufficient to explain symptoms	56	16.66
4 No physical illness detected	41	12.20
5 Past history of mental illness	11	3.27
6 Others	56	16.66
7 Not known	3	0.39

It was the existence of certain mental symptoms along with physical illness in majority of cases (28 per cent) and the next common reason was abnormal behaviour. These categories theoretically are not mutually exclusive. But here the single most prominent reason has been taken.

TABLE III

<i>Purpose of referral (WHAT?)</i>	No. (336)	Percentage
1 Help in management along with medical management	177	52.67
2 Diagnosis ('organic' vs 'functional')	98	29.16
3 Evaluation prior to special procedures (renal transplant, MTP etc.)	44	13.09
4 Crisis intervention	9	2.68
5 Not clear	8	2.38

In the majority (53%) of cases psychiatric management was requested along with the ongoing physical management. In about 29 per cent help was sought to clarify the diagnoses generally between organic vs functional disorders.

TABLE IV

<i>Psychiatric Evaluation</i>	No.	Percentage
1 Organic brain syndrome	69	20.53
2 Psychological reaction to physical illness	62	18.45
2 Independent primary psychiatric disorder	59	17.56
4 Psychiatric illness co-existing with physical illness	30	8.92
5 Psychophysiological disorders	7	2.08
6 Psychological reaction to conditions of hospital stay	6	1.78
7 Diagnosis deferred	15	4.46
8 Evaluation incomplete	3	0.89
9 No psychiatric illness	85	25.29

After psychiatric evaluation the largest category belonged to no psychiatric illness group (25 per cent). The next common was organic brain syndrome (21 per cent) that includes both psychotic and nonpsychotic OBS. However, in as much as 17 per cent of cases there was an independent primary psychiatric illness having no casual relationship with the existing physical illness or where the total clinical picture is accounted for by the psychiatric diagnosis. In about 9 per cent there was a diagnosable psychiatric disorder having a doubtful or complex etiological relationship with the coexisting physical disorder.

TABLE V—*Psychiatric Diagnosis*

(Percentage)

	N	%	Taylor & Doody (1979)	Fava & Pavan (1980)	Torem et al. (1979)
Organic psychoses	65	19.34	18.8	** 1.6	17.7
*Functional psychoses	23	6.84	4.5	3.2	6.4
*Neuroses	105	31.25	14.2	19.8	42.5
Personality disorder	3	0.89	11		
Drug dep. and alcohol	6	1.78	5	18.4	4.3
Psychosom. Dis.	7	2.08	3.7	6	2.1
Others	27	8.02	3.7	3.2	16.3
No psy. diag.	25	25.29	2.3	10.8	4.3
Diag. deferred	15	4.46			6.4
Depression all kinds			36.8	37.1	

**Patients of organic psychoses were managed by Neurology Dept.

Table V shows the psychiatric diagnosis according to ICD-9. Commonest diagnosis is Neurosis (31 per cent). Next is organic psychosis 19 per cent. In 15 cases i. e. about 4.4 per cent of cases diagnosis was deferred.

TABLE VI *Medical Diagnosis (ICD-9)*

	N (336)	Percentage
Infections and parasitic diseases	19	5.65
Neoplasms	22	6.54
Endocrine, nutritional, and metabolic	10	2.97
Blood and Blood forming organs	4	1.19
Nervous system and sense organs	25	7.43
Disorders of CVS	27	8.03
Disorders of RS	10	2.97
Disorders of GIT	40	11.90
Disorders of GUT	47	13.96
Pregnancy and childbirth	18	5.35
Injury and poisoning	41	12.20
Others	21	6.25
Physical diagnosis deferred	8	2.38
No physical disease	44	13.09

Table VI gives the distribution of physical diagnoses, again according to ICD-9. The largest group is disorders of genito-urinary tract. The next commonest referral was in cases of injury and poisoning (12 per cent) and then disease of GIT (12 per cent).

TABLE VII *Treatment*

	No.	Percentage
Drugs	134	39.88
Advice to treating team	101	30.06
Supportive psychotherapy	56	16.66
Investigations	7	2.08
Family and social case work up	3	0.89
NIL SPECIAL	65	19.34

In most cases more than one treatment method was used. In about 40 per cent of cases drugs were prescribed. In 30% of patients active advice to treating team was given in terms of the handling of the patients or relatives.

In 19 per cent no specific treatment was advised.

TABLE VIII *Co-operation Received*

	N	Percentage
Good	299	88.08
Average	20	5.94
Poor	1	0.30
Not known	10	2.97
Died	6	1.78

In about 89 per cent of cases good cooperation and compliance was found on follow up.

TABLE IX *Utility*

	No.	Percentage
Useful	316	93.85
Not useful	20	6.15
Reasons —Co consultation sent too late/early —Patient uncooperative		

In about 93 per cent of cases treating teams found the psychiatric service useful. In about 20 (6 per cent) cases it was not helpful for various reasons like when the consultation was sent to early or too late in the treatment, when the patient is not explained about psychiatric referral and he refuses to cooperate. Six patients died during the inpatient follow up (Table IX).

TABLE X *Need for continuing Treatment*

	No.	Percentage
Nil	112	33.33
Short term	146	43.35
Long term	46	13.69
Not ascertained	26	7.74
Deaths	6	1.78

TABLE XI—*Disposal*

	No.	Percentage
Managed in the respective ward	247	73.36
Transferred to psychiatry ward	13	3.86
Transferred to Psychiatry OPD	11	3.27
Only evaluation done	65	19.30

Forty-three per cent of patients were felt to require short-term psychiatry follow up whereas 14 per cent needed long term psychiatric care after discharge. However, no treatment was considered necessary for 33 per cent of patients. Most patients were managed in their respective wards (Table-X).

TABLE XII—*“Nil Psychiatry”*

	No. (N=85)
Neurological disorders	8
GUT	17
Accidents and poisoning	5
Others	34
Nil physical	15
Diag. deferred	6

It was interesting to examine the cases with “Nil psychiatry” label. The largest group was disorders of genito-urinary tract. The reason for this being a routine psychiatric evaluation of all cases planned for renal transplant surgery. Worth noting is the category of ‘nil physical’ (15 cases). These patients presented with some symptoms for which neither physical illness nor any psychiatric illness could be accounted for. It was worth our while to follow these patients to observe the course of events. This category may give clues towards the earliest manifestations of the disease as well as the course.

Looking at the referral rates there is remarkable comparability across centres in various parts of the world. I have already presented figures from USA, UK and India. Taylor and Doody (1979) from Canada reported a rate of 1.26 per cent. Another point of similarity is in the source of referral. Largest majority of referrals comes from the department of medicine.

toms or mental symptoms coexisting with problems and past history etc. It reflects on the sensitivity and awareness of our medical colleagues. In our institute all medicine residents are posted in psychiatry for two months in rotation. That can considerably explain this positive trend in our liaison work. A comparison of psychiatric diagnoses is listed as under.

	Taylor & Doody 1979	Fava & Pavan 1980	Torem et al. 1979	Present study
Organic psychoses	18.8%	1.8%	17.7%	19.34%
*Functional psychoses	4.5%	3.2%	6.4%	6.83%
*Neuroses	14.2%	19.8%	42.5%	31.25%
Personality disorders	11%			0.89%
Drug dependence and alcoholism	5%	18.4%	4.3%	1.78%
Psychosomatic disorder	3.7%	6%	2.1%	2.08%
Others	3.7%	3.2%	16.3%	8.02%
No psychiatric diagnosis	2.3%	10.8%	4.3%	25.29%
Diagnosis deferred			6.4%	4.46%
*Depression of all kinds	36.8%	38%		

Only a few studies have looked at the purpose of referral. The commonest problem referred for help is the management of the patients 38.6 per cent (Taylor and Doody, 1979); 40.3 per cent (Fava and Pavan, 1980); and in our study it was 52.67 per cent. Next common is the help sought in diagnoses 17 per cent (Torem *et al.*, 1979); Taylor and Doody (1979) 27.7 per cent; 32.4 per cent (Fava and Pavan, 1980); 29.16 per cent in our study.

Looking at Table II, it appears that it is not simply the presence of abnormal behaviour that prompted psychiatric consultation, it is as much the other reasons like organic illness insufficient to explain symp-

The trends worth noting are a low representation of personality disorders and drug/alcohol dependence in our sample which may reflect on the distribution of these disorders in general population. There is a uniformly low representation of psychosomatic disorders. It is possible that our medical and surgical colleagues are efficiently able to manage these conditions in totality but what is more likely is that they are unaware of the kind of help that the psychiatrist can provide in the long term care of these patients. This area needs further attention for enhancing the quality of patient care and increasing the awareness of the intervention strategies by the psychiatrist in the medical colla-

gues. A considerably large number of 'nil psy' patients again is a positive point for an active liaison service that is easily available and made use of. Incidence of neuroses is comparable to most other reported figures from all over the world.

Looking at the relationship between the medical and the psychiatric illness, in about 20 per cent of cases the psychiatric symptoms were directly related to the physical illness or hospitalization and in other 9 per cent the relationship was more complex. In 17.5 per cent of cases psychiatric disorder gave rise to such somatic symptoms that it led to hospitalization in the medical wards.

The above review and discussion amply demonstrate that psychiatrists help is called not simply to answer the questions of 'functional' vs. 'organic' but for many other problems like help in diagnosis and total management. This synthesis of medical specialities with psychiatry indicates that in a given patient, psychological and physical influences lie in a continuum that determines the onset, course and prognosis of medical disease.

In summary role of liaison services can be summarised under three broad headings:

Service, Education and Research. Clinical service includes advice on matters of diagnosis and management of patients. In the medical and surgical wards climate is generally emotionally charged along with the stress of discomfort and uncertainty. In such situations there are chances of acute psychological decompensation and breakdown of communication between patient and doctor and interpersonal conflicts. The crux of the liaison function lies in resolving this conflict which interferes in optimum medical care.

Education is a function of increasing importance. Liaison psychiatry has bro-

ught the emphasis on the teaching of psychosocial aspects of medicine in diverse manners like bedside interviews, interdepartmental case conferences etc.

Research possibilities are unlimited. Numerous studies on the psychosocial aspects of physical illness and new medical and surgical procedures, such as chronic haemodialysis, open heart surgery, organ transplantation doctor-patient relationship; on stress and coping strategies; on psychological antecedents of illness and many other relevant clinical problems have been carried out.

Apart from what has already been done a great deal can be further achieved. In India there is a need and scope for expansion of the liaison psychiatry. Perhaps the present status is a reflection of the manpower that we have. As the number of psychiatrists increases, psychiatry should permeate the various medical disciplines.

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