British Journal of Psychiatry (1993), **162**, 204–211

Psychiatric Referrals within the General Hospital: Comparison with Referrals to General Practitioners

FRANCIS CREED, ELSPETH GUTHRIE, DAWN BLACK and MARK TRANMER

The increase in referrals to a new consultant psychiatrist within a teaching hospital was documented. During 1987/88 there were 279 consecutive referrals from physicians and surgeons (159 out-patients and 120 ward-consultation requests) which were compared with 184 consecutive GP referrals over the same period. Hospital referrals tended to be older, and less socially disadvantaged, but with psychiatric disorder of similar severity to GP referrals. They were more likely to have a concurrent physical diagnosis, and demonstrate somatisation. The latter was not confined to patients without physical disorder; half of the patients classified as 'psychological reaction to physical disorder' showed somatisation. ICD-10 appeared to perform better than ICD-9 or DSM-III for somatoform disorders, but a comprehensive classification system is still needed for liaison psychiatry. Personal discussion with the referring doctor was most common among the ward-consultation requests; in this situation the referring doctor usually continued primary management of the patient.

Although psychiatric units have become well established in district general hospitals in the UK, an integrated psychiatric service to general medical and surgical units has been developed in only a few centres (Brooks & Walton, 1981; Mayou & Lloyd, 1985; Anderson, 1989; Mayou *et al*, 1990). There are few examples of true 'liaison' services, in which the psychiatrist is a member of the medical team. Most services are based on the 'consultation-liaison' model, but liaison between physician and psychiatrist is often very limited (Mezey & Kellet, 1971; Anderson, 1989).

Consultation-liaison services in the UK have been primarily concerned with assessment of self-poisoning patients (Gath & Mayou, 1983; Mayou & Lloyd, 1985; Brown & Cooper, 1987). Psychiatrists have claimed that further consultation-liaison work in the medical and surgical units is "constantly eroded by other commitments" (Mayou & Lloyd, 1985), suggesting that low priority is given to this work. This low priority is also reflected in district planning (Kingdon, 1989). However, it has rightly been indicated that the poor mental health of the physically ill merits better care than at present (Lloyd, 1980; Rodin & Voshart, 1986), and that high-quality general medical care should include improved recognition and understanding of psychological aspects of physical illness, including the somatic presentation of psychiatric disorders (Sartorius, 1987).

There appears to have been a lack of compelling evidence for the need to develop psychiatric services to medical and surgical units. The discrepancy between the prevalence of psychiatric disorders in medical patients (approximately 20%) and the referral rate to psychiatrists (less than 1%) has been quoted (Mayou, 1989), but it is unrealistic and undesirable to suggest that all patients on a medical ward with psychiatric disorder should be referred.

Previous studies have shown a sharp increase in psychiatric referrals when an active liaison service is provided to particular medical units (Torem *et al*, 1979; Sensky *et al*, 1985) and a more modest increase when liaison sessions are set aside for general hospital referrals (Brown & Cooper, 1987; House & Jones, 1987). However, the appropriate level of referral is unknown and the high referral rates of some services (Crisp, 1968; Torem *et al*, 1979; Sensky *et al*, 1985) may mean that the psychiatrist sees mild psychiatric disorder which would be more appropriately dealt with by physicians (Fauman, 1983; Seltzer, 1989).

Nearly all reports of a developing liaison service have come from teaching hospitals (Mayou *et al*, 1990). Some have concerned specialist units, such as cancer or obstetric units (Ramirez, 1989; Appleby, 1989), others have included a broader range of clinical problems (Crisp, 1968; Brown & Cooper, 1987; House & Jones, 1987). Different services cannot be compared unless appropriate clinical details are recorded – diagnosis alone is inadequate to detect changes within a single service over time (Brown & Cooper, 1987; Brown & Waterhouse, 1987).

Thomas (1983) classified his patients according to type of clinical problem rather than diagnosis. Sensky *et al* (1985) used this typology to demonstrate that closer liaison led to increased referral of two types of problem: psychological reactions to physical illness and somatic presentation of psychiatric disorder (somatisation). Psychological reactions to physical illness are being recognised as important, and

specialised services are being developed (Maguire & Sellwood, 1982; Ramirez, 1989). For patients showing somatisation the evidence is conflicting. One American survey reported that they are more effectively dealt with by psychiatrists than physicians (Smith *et al*, 1986), but UK reports have been more dubious, referring to "insoluble management problems where non psychiatric staff had come to the end of their tether" (Brooks & Walton, 1981), or referrals "as a last resort when all other departments have failed to produce any benefits" (Thomas, 1983).

Thus more data are required to accurately categorise patients referred to psychiatrists within a general hospital, to compare different services, and to assess whether developing a consultation–liaison service brings to the psychiatrist patients whose disorder might benefit from psychiatric assessment and treatment. In the absence of standardised criteria of 'appropriateness', the present study compared patients referred by hospital consultants with those referred by general practitioners (GPs).

The survey described in this paper was performed in a teaching hospital in which a new district psychiatry service has been developed over the last eight years; the service to the general hospital is one part of an overall district service. Because of the limitations imposed by lack of routine data collection, the study was principally concerned with patients referred to a single consultant.

There were two parts to the study. Firstly, the development of the service was documented by counting referrals to a single consultant during the first three years following his appointment. Secondly, a detailed case review of consecutive patients seen by the same consultant over two years was undertaken in order to test the hypothesis that there would be no significant differences in the clinical characteristics of patients referred to a psychiatrist by GPs and by physicians/surgeons in a general hospital.

Method

(a) *Development of the service*. For the first three years of the developing service (1982/84) and during the two years of the case review (1987/88) the number of referral letters and ward consultation requests received by the named consultant (FC) were counted. During the latter period only, the number of out-patient referrals to the other general psychiatrists was also counted; this was not possible for ward consultation requests as these had not been accurately documented.

(b) *Case review study*. Details were recorded on those patients who were actually seen by the consultant and his junior staff (some patients did not attend their appointment). Referrals solely for assessment following deliberate self-harm and emergency ward requests were excluded as they are dealt with principally by the duty psychiatrist. Other patients not included were those referred to a maintenance clinic for chronic disorders (held at a health centre) and emergency admissions to the in-patient unit and day hospital.

A detailed pro forma was completed for each patient seen by the consultant or the senior registrar. The consultant (FC) completed pro formas for patients he saw personally ($n=289$). Pro formas were completed by two registrars (EG and DB) for patients whom they saw and usually discussed with the consultant ($n=40$ and 32 respectively). Patients seen by the senior registrar had forms completed by FC in consultation with the senior registrar ($n=102$). This procedure was intended to reduce the number of doctors involved in the study and to improve the consistency of the data.

The pro forma included relevant demographic and social details, specific reason for referral, and personal discussion of the case with the referring doctor. Diagnosis was recorded using ICD-9 (World Health Organization, 1978), DSM-III (American Psychiatric Association, 1987) and ICD-10 (World Health Organization, 1992); severity of disorder and overall disability were assessed using Axes 4 and 5 of DSM-III, and for patients with depression, the Beck Depression Inventory (BDI) was used (Beck *et al*, 1961). The nature of the presenting problem was categorised using the scheme of Thomas (Thomas, 1983) and the presence or absence of somatisation using the criteria of Katon *et al* (1984). The latter require a physical complaint or excessive anxiety about physical illness as a predominant feature and absence of organic illness to explain the symptoms. The patient may selectively focus on a somatic symptom of a psychological disorder (e.g. headache) or greatly amplify a somatic symptom which may have arisen from organic disease.

Any obvious abnormal illness behaviour noted at interview was recorded. These measures were discussed by the three raters at several meetings to ensure that they were being used in a similar way, but no standardised criteria were used.

For analysis, the patients were considered in three groups. The first group comprised out-patient referrals from GPs and other community agencies. The second group comprised routine out-patient referrals from physicians and surgeons in the general hospital (hospital referrals). The third group was ward-consultation requests; these patients were seen on the medical or surgical wards, usually within a few days of the request being made.

Statistical differences between these three groups were tested using χ^2 and Mann–Whitney *U*-tests as appropriate.

Results

Development of the service

The number of patients referred to the consultant from general hospital physicians and surgeons (both out-patient referrals and ward-consultation requests) increased over the first three years (1982–84) (Fig. 1). This increase coincided with the commencement of the psychiatrist's presentation

https://doi.org/10.1192/bjp.162.2.204 Published online by Cambridge University Press

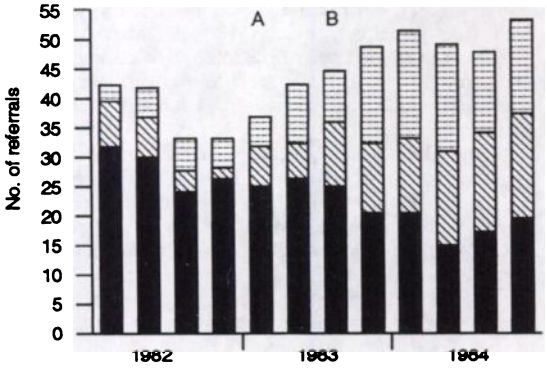

Fig. 1 Number of referrals from general practitioners (■), out-patients from general hospital doctors (▨) and ward consultation requests (⊞).

of cases at the physicians' grand clinical ward round (point A on Fig. 1) and the appointment of two further general psychiatrists who shared the referrals from GPs (point B on Fig. 1). From 1984 to 1988 the relative proportion of GP out-patient referrals, hospital out-patient referrals and ward consultation requests remained relatively static even though the total annual number of referrals increased by 36% during this time.

During the two years of the case review (1987–88) the consultant received 225 (54%) out-patient referrals from GPs and other community sources and 193 (46%) out-patients from general hospital doctors. The figures for the department as a whole during the same time period were 1336 (73%) GP referrals and 489 (27%) hospital referrals. The index consultant therefore received approximately 40% of the out-patient referrals from the general hospital.

Case review

Complete case review data were available for 184 GP referrals, 159 general hospital out-patient referrals and 120 ward consultation patients. A further 75 patients were referred but did not attend their psychiatric out-patient appointment (41 GP and 34 hospital referrals).

Within the hospital out-patient and ward consultation groups the majority of referrals (86%) came from medical units and only a minority (14%) from surgical units. The 241 referrals by physicians came from seven medical units; 119 patients (49%) were referred from two units (gastro-enterology and neurology) and 122 patients from the remaining five units.

Demographic factors and reason for referral

Table 1 shows that patients referred from the general hospital (whether out-patients or ward consultations) were older than GP referrals; fewer were separated/divorced/widowed and fewer were in social classes 4 or 5. The principal reason for referral was more likely to be a request for help with an unexplained physical symptom (often worded "could psychiatric disorder explain the physical symptom(s)?") or help with management of a psychological problem that interfered with their medical management (e.g. a diabetic patient with poor compliance).

Diagnosis

Depressive illness (using ICD-9) was equally common in the three groups (Table 2), but adjustment reactions and anxiety were commoner in the hospital out-patient referrals, organic brain syndromes in the ward consultation patients, and personality problems and substance abuse were more prominent among patients referred from GPs. The diagnostic categories hysteria, hypochondriasis and neurasthenia were used rarely, as for most patients other diagnoses (such as depression) were applicable.

Table 1
Demographic factors and reasons for referral

	GP referrals ($n = 184$)	Hospital referrals ($n = 159$)	Ward consultations ($n = 120$)	
Sex: % female	50	60	57	NS
Mean (s.d.) age: years	38 (13)	43 (14)	43 (16)	*
Marital status: %				
married	39	54	54	
single	33	26	29	**
separated/divorced/widowed	28	20	15	
Social class 4 or 5: %	62	44	51	*
Unemployed (males only): %	41	21	28	**
Reason for referral (two reasons allowed): %				
Management of recognised psychiatric disorder	70	47	43	
Psychiatric problem interfering with medical management	4	23	30	
Unexplained physical symptom	8	46	37	
?Psychiatric disorder	27	43	53	

*$P = < 0.05$, **$P = < 0.01$.

https://doi.org/10.1192/bjp.162.2.204 Published online by Cambridge University Press

Table 2
Psychiatric diagnoses by referral group

	GP referrals: % ($n=184$)	Hospital referrals: % ($n=159$)	Ward consultations: % ($n=120$)
No psychiatric diagnosis	6	5	13
Adjustment reaction	7	19	11
Schizophrenia/manic-depressive psychosis	16	6	14
Organic brain syndrome	3	1	12
Anxiety	9	24	13
Depression	33	28	21
Hysteria/hypochondriasis/neurasthenia	2	6	4
Anorexia nervosa	4	5	4
Personality disorder/alcohol and drug dependence	20	6	8

$\chi^2=90.2$, d.f. = 16, $P<0.0001$.

Severity and aetiology of disorder

In all, 34% of GP referrals, 26% of hospital out-patient referrals and 32.5% of ward consultations were rated as showing marked impairment of social relations or occupational functioning (level 5 or more on Axis 5 of DSM-III). For patients with depression who completed the BDI the proportions scoring 26 or more (i.e. severe depression) were: 46% (16/35) for GP referrals, 51% (18/35) for general hospital out-patient referrals, and 57% (13/23) among ward consultation patients.

There were no significant differences between the three groups in terms of predisposing and precipitating factors. Fifteen per cent, 12% and 14% respectively had a family history of treated psychiatric disorders; 22%, 28% and 18% had lost a parent during childhood. The proportions of patients who had previously seen a psychiatrist were 42%, 35% and 35% respectively, but 23% of GP referrals had previously been an in-patient in a psychiatric unit compared with 11% and 17% of the hospital groups ($\chi^2=8.5$, d.f. = 2, $P<0.05$). The proportions who had experienced moderate or severe recent social stress (score 4 or more on DSM-III Axis 4) were 44%, 52% and 45%.

Physical illness

A concurrent physical diagnosis was recorded in 21% of GP referrals, 64% of hospital out-patient referrals and 85% of ward consultations ($\chi^2=130.8$, d.f. = 2, $P<0.0001$). If 'physical' diagnoses of a functional disorder (e.g. functional disorders of the gut, ill-defined symptoms and signs) were excluded, the proportions were reduced to 18%, 53% and 77% respectively. Thus the majority of patients referred from the general hospital had two diagnoses – a physical and a psychiatric one.

The relationship between physical and psychiatric disorders is shown in Table 3. The categories 'psychological reaction to physical illness' and 'somatic presentation of psychiatric disorder (somatisation)' accounted for two-thirds of the hospital out-patient referrals and ward consultations; these categories represented the major difference between hospital and GP referrals.

Presentation of disorder

The criteria of somatisation were fulfilled by 68% of hospital out-patient referrals, 46.5% of ward consultation patients, and 23% of GP referrals. Of these, 36%, 28% and 8% respectively were considered to have had excessive medical investigations before psychiatric referral ($P<0.001$). The proportions for whom it was observed that family members openly reinforced abnormal illness behaviour were 20%, 25% and 6% respectively ($P<0.001$).

Somatisation was not confined to those patients rated as somatic presentation by the Thomas classification (Table 3). Half of the patients in the category 'psychological reaction to illness' showed somatisation. Such patients had a physical illness, for example arthritis, which was often chronic, and upon which the more recent depression was blamed. However, the depression often presented as more

Table 3
Classification of patients according to system of Thomas (1983)

	GP: % ($n=184$)	Hospital: % ($n=159$)	Ward: % ($n=120$)
Coincidental psychiatric disorder or no physical illness	72	21	8
Cerebral complications of physical disease	3	1	12
Abnormal behaviour producing physical illness	3	3	11
Psychological reaction to physical illness	3	26	32
Somatic presentation of psychiatric disorder	14	45	28
Psychosomatic disorders	-	1	-
No psychiatric disorder	5	3	9

$\chi^2=206.5$, d.f. = 14, $P<0.001$.

painful joints or increased disability. In this way the categories 'psychological reaction to physical illness' and 'somatisation' overlapped, and it was not easy to decide which category was the most appropriate for some patients. Similarly, patients included in the category 'abnormal behaviour leading to physical disorder' might have alcohol-related gastritis but present with various bodily pains predominantly attributable to depression – another example of somatisation.

Identifiable social stress (Axis IV of DSM-III, excluding serious physical illness) was recorded in 51% of the patients in the somatic presentation group and 33% of those in the psychological reaction to physical illness group. This proportion was similar to patients with no significant physical illness (predominantly GP referrals). Thus in patients classified as 'psychological reaction to physical illness' it was often possible to identify two sources of stress: a physical illness, to which the person had an adverse reaction, but in addition a social stress which might be equally important in the aetiology of psychiatric disorder.

Classification of disorder

The most frequent psychiatric diagnoses (using broad categories ICD-9) for patients in five of the Thomas categories are shown in Table 4. Somatic presentation of psychiatric disorder can be seen to have occurred with all psychiatric diagnoses. Psychological reactions to physical illness were most frequently depression, adjustment reactions and anxiety. In four patients, anorexic or hypochondriacal syndromes developed as part of an adverse response to physical illness. Patients in this category with anorexia nervosa had presented with a physical symptom not directly attributable to the eating disorder.

Diagnostic classifications

A comparison of the three diagnostic systems (ICD-9, ICD-10, DSM-III) showed little difference in the major diagnostic categories, including the patients categorised as 'no psychiatric diagnosis'. The principal differences lay in the ICD-10 somatoform disorders. The distribution of 40 patients with somatoform disorder according to ICD-10 are shown in Table 5, together with the diagnoses they had been assigned under the other diagnostic systems. The DSM-III category 'somatisation disorder' was rarely used (3 patients), whereas DSM-III 'hypochondriasis' was frequently used (16 patients).

Liaison and overall management

Personal discussion of the patient between the psychiatrist and the referring doctor took place before and/or after the initial consultation for 28% of the GP referrals and 32% of the hospital out-patient referrals compared with 86% of the ward consultations ($\chi^2 = 113.0$, d.f. = 2, $P < 0.0001$). Continued management was left to the referring doctor for 23% of GP referrals, 18% of hospital out-patients and 51% of ward consultations. Out-patient psychiatric treatment (including that by the clinical psychologist) was offered to 47%, 61% and 28% of the patients respectively. The proportions transferred to in-patient or day hospital psychiatric treatment were 13%, 6% and 10%.

Discussion

There are a number of limitations to this study which must be recognised. Firstly, data were only collected for referrals to a single consultant. This was because of the difficulties in collecting data for patients referred to other consultants. It may mean that the patients included in this study reflect the special interest of, or special referral pattern to, the index consultant.

This survey should not therefore be regarded as a complete survey of liaison referrals; patients referred to other consultants and urgent ward consultation requests to the duty psychiatrist are likely to be different from those included in this study. Deliberate self-harm patients were excluded as they are routinely referred and would tell us little about the changes which occur when a consultant-led liaison service

Table 4
Psychiatric diagnosis and Thomas classification

	No physical illness	Cerebral complications	Abnormal behaviour	Psychological reactions	Somatic presentation
Psychiatric diagnosis					
Adjustment reaction/physical malfunction	16		2	20	16
Schizophrenia/manic-depressive psychosis	26		2	9	17
Organic brain syndrome	6	18	1	1	
Anxiety	22		1	14	31
Depression	60	2	1	27	38
Hysteria/hypochondria/neurasthenia	1			2	13
Anorexia nervosa	3		7	2	7
Personality disorder/alcohol/drug dependency	34		8	5	4
Total	168	20	22	80	126
No psychiatric diagnosis	6		1	6	3

https://doi.org/10.1192/bjp.162.2.204 Published online by Cambridge University Press

Table 5
Diagnosis according to different systems

ICD-10	ICD-9	DSM-III
45.0 Multiple somatisation disorder ($n=4$)	3 physiological malfunction	3 somatisation disorder
	1 depression	1 hypochondriasis
45.1 Undifferentiated somatisation disorder ($n=7$)	4 physiological malfunction	1 anxiety
	1 hysteria	2 psychogenic pain
	1 depression	3 hypochondriasis
	1 adjustment reaction	1 adjustment reaction
45.2 Hypochondriacal syndrome ($n=5$)	3 hypochondriasis	3 hypochondriasis
	2 physiological malfunction	1 depression
		1 anxiety
45.3 Psychogenic autonomic dysfunction ($n=17$)	5 anxiety	7 anxiety
	10 physiological malfunction	6 hypochondriasis
	1 adjustment reaction	1 psychogenic pain
	1 no psychiatric disorder	1 adjustment reaction
		2 no psychiatric disorder
45.4 Persistent pain disorder ($n=5$)	1 depression	1 depression
	2 physiological malfunction	3 psychogenic pain
	1 adjustment reaction	1 hypochondriasis
	1 anorexia nervosa	
45.8 Other psychogenic disorder ($n=2$)	2 physiological malfunction	2 hypochondriasis

is developed; they represent the major part of the referrals to the duty psychiatrist.

Secondly, the detailed case-review study cannot be regarded as a series of objective measurements made under blind conditions. The raters were not blind to the patients' origin of referral and some of the assessments were not standardised. However, by confining the study to the work of a single consultant, reasonable consistency of the clinical assessments could be obtained.

Development of the service

The limited data concerning the development of the service have been provided to put into context the patients included in this report. The majority of patients referred within the general hospital had not previously seen a psychiatrist. This suggests that physicians and surgeons began to refer patients who would not previously have received psychiatric help; this therefore represents a real increase in the demands on the psychiatric service.

The present service appears to have overcome the factors which had previously been blamed for a low referral rate in the general hospital: too few psychiatrists, a negative attitude of physicians towards psychiatric referral, inappropriate referrals and poor communication between physicians and psychiatrists (Mezey & Kellet, 1971; Brooks & Walton, 1981). Other services do not appear to have attracted an increasing number of referrals over time (Brown & Waterhouse, 1987); the reasons for this difference need to be explored in studies which compare different services.

The timing of the increase in referrals suggests that increased consultant time for general hospital work and involvement in the physician's grand rounds may have been important factors in developing the liaison service. Many other district services probably have too few consultant sessions to develop a full psychiatric service to the general hospital (Brooks & Walton, 1981; Mayou & Lloyd, 1985; Anderson, 1989) – a situation predicted 20 years ago when psychiatric services in the general hospital setting were being planned (Russell, 1973).

The frequent discussions in the context of ward consultations represent good communication between psychiatrist and physician: such work cannot be done out of hours, when the referring doctor is unavailable (Mayou & Lloyd, 1985). The fact that continued management remained with the physician following many of the ward consultation requests indicates the need for clear and appropriate advice from the psychiatrist (Mezey & Kellet, 1971; Mason, 1975; Pfeffer, 1982; Leonard *et al*, 1990). This probably requires the experience of a senior registrar or consultant psychiatrist (Mayou & Lloyd, 1985; Royal College of Psychiatrists, 1988). Presentations at the physician's grand rounds may have helped to overcome negative attitudes towards psychiatric referral; these rounds carry the potential to improve physicians' ability to treat psychiatric disorders themselves (Mayou & Smith, 1986). These discussions certainly increased the understanding of which patients may be helped by the psychiatric service and

therefore reduced the chances of 'inappropriate' referrals mentioned in some services (Brooks & Walton, 1981; Anderson, 1989).

Although this study may reflect the consultant's special interest it is important to view the patients in the context of the developing liaison service as a whole. By the time of the case review (1987/88) three other general psychiatrists received one-fifth or more of their referrals from physicians and surgeons, mostly from units other than neurology and gastroenterology. At the time of the study none of the consultants held regular liaison meetings with particular medical units – the opportunity to refer is equally available to all units, although an informal list of nominated psychiatrists to each medical and surgical unit exists.

Case review

This study aimed to examine whether the growth of this type of psychiatric service attracts patients who have psychiatric disorders sufficiently severe to merit referral and in whom there might be a reasonable expectation of response to psychiatric treatment. This appeared to be the case, supporting Lloyd's comment that there are mentally ill patients in general medical settings who have not previously been receiving the psychiatric treatment they deserve (Lloyd, 1980). Only a small proportion of cases in the present series would be described as "insoluble problems referred to psychiatrists as a last resort" quoted in previous studies (Brooks & Walton, 1981; Thomas, 1983). House & Jones (1987) also commented that their service did not appear to attract 'difficult' patients who were not mentally ill.

The differences between hospital and GP referrals in demographic factors probably reflects the origin of the patients; nearly all GP referrals were from the socially deprived inner-city area, whereas the majority of hospital referrals came from other districts, most of which have superior socioeconomic conditions. This may also underlie the significant differences in diagnostic categories: more personality and drug-abuse patients were referred from the local GPs.

The high proportion of patients in the general hospital who showed 'somatisation' might have been a reflection of the high referral rate from gastroenterology and neurology, since up to one-third of patients referred to these specialties have non-organic complaints (Holmes *et al*, 1987; Hopkins *et al*, 1989). However, a similar proportion of patients showing somatisation was found among referrals from all other units. Other liaison services have reported a high prevalence of such patients among general hospital referrals (Crisp, 1968; Thomas, 1983; Katon *et al*, 1984).

Implication for liaison psychiatry

This study has raised several important issues for liaison psychiatry. Firstly, it has demonstrated that the increased number of referrals within the general hospital represents a real increase in workload. This may be one reason why many district services are not keen to develop their liaison services (Kingdon, 1989). Secondly, certain aspects of training have been highlighted which are unlikely to be gained outside centres which have a well developed liaison service. The liaison psychiatrist must be adept at assessing relevant physical findings, be skilled at engaging patients with marked somatic presentations of psychiatric disorder, even in the presence of physical illness, and be prepared to work with the family members who might reinforce abnormal illness behaviour (Creed & Guthrie, 1993; Bass & Benjamin, 1993). In addition, they must communicate clearly with physician colleagues and be prepared to leave continued management with the medical team.

Thirdly, there is the issue of priorities. It is likely that patients similar to those documented in this study are attending most district general hospitals but not receiving the psychiatric assessment and treatment they require. There may be good clinical, and even economic reasons (Smith *et al*, 1986; Bass & Murphy, 1990) for attempting to develop a service for somatisation patients and those with a marked psychological reaction to physical illness but without adequate records to enable proper audit of the quality of a district liaison service (Mayou *et al*, 1990), these deficiencies are unlikely to be documented.

This was a study of referrals rather than evaluation of psychiatric intervention. Although psychiatric treatment is effective in selected populations within the general hospital (Maguire & Selwood, 1982; Pilowsky & Barrow, 1990; Guthrie *et al*, 1991), the evaluation of a full consultation–liaison service remains to be performed.

Acknowledgements

This study was only possible because of the clerical and secretarial support of Mrs Joan Bond and data preparation by Daniel Ramwell. Dr Michael Sharpe made invaluable comments on an earlier draft of this paper.

References

American Psychiatric Association (1980) *Diagnostic and Statistical Manual of Mental Disorders* (3rd edn) (DSM-III). Washington, DC: APA.

Anderson, H. M. (1989) Liaison psychiatry in Scotland: the present service. *Psychiatric Bulletin*, **13**, 606–608.

Appleby, L., Fox, H., Shaw, M., *et al* (1989) The psychiatrist in the obstetric unit establishing a liaison service. *British Journal of Psychiatry*, **154**, 510–515.

BASS, C. & BENJAMIN, S. (1993) The management of chronic somatisation. *British Journal of Psychiatry* (in press).

—— & MURPHY, M. (1990) The chronic somatizer and the Government White Paper. *Journal of the Royal Society of Medicine*, **83**, 203–205.

BECK, A. T., WARD, C. H., MENDELSON, M., *et al* (1961) An inventory for measuring depression. *Archives of General Psychiatry*, **4**, 561–571.

BROOKS, P. & WALTON, H. J. (1981) Liaison psychiatry in Scotland. *Health Bulletin*, **39**, 218–227.

BROWN, A. & COOPER, A. F. (1987) The impact of liaison psychiatry service on patterns of referral in a general hospital. *British Journal of Psychiatry*, **150**, 83–87.

BROWN, T. M. & WATERHOUSE, J. (1987) A psychiatric liaison service in a general hospital – eighteen years on. *Health Bulletin*, **45**, 190–196.

CREED, F. & GUTHRIE, E. (1993) Interview techniques for the somatising patient. *British Journal of Psychiatry* (in press).

CRISP, A. H. (1968) The role of the psychiatrist in the general hospital. *Postgraduate Medical Journal*, **44**, 267–276.

FAUMAN, M. A. (1983) Psychiatric components of medical and surgical practice, II: Referral and treatment of psychiatric disorders. *American Journal of Psychiatry*, **140**, 760–763.

GATH, D. & MAYOU, R. (1983) Consultation–liaison psychiatry in the United Kingdom. *Advanced Psychosomatic Medicine*, **11**, 109–126.

GUTHRIE, E., CREED, F. H., DAWSON, D., *et al* (1991) A controlled trial of psychological treatment for the irritable bowel syndrome. *Gastroenterology*, **100**, 450–457.

HOLMES, K. M., SALTER, R. H., COLE, T. P., *et al* (1987) A profile of District Hospital gastroenterology. *Journal of the Royal College of Physicians of London*, **21**, 111–114.

HOPKINS, A., MENKEN, M. & DEFRIESE, G. (1989) A record of patient encounters in neurological practice in the United Kingdom. *Journal of Neurology, Neurosurgery and Psychiatry*, **52**, 436–438.

HOUSE, A. O. & JONES S. J. (1987) The effects of establishing a psychiatric consultation–liaison service: changes in patterns of referral and care. *Health Trends*, **19**, 10–12.

KATON, W., RIES, R. & KLEINMAN, A. (1984) A prospective DSM-III study of consecutive somatisation patients. *Comprehensive Psychiatry*, **25**, 305–314.

KINGDON, D. (1989) Mental health services: results of a survey of English district plans. *Psychiatric Bulletin*, **13**, 77–78.

LEONARD, I., BABBS, C. & CREED, F. (1990) Psychiatric referrals within the hospital – the communication process. *Journal of the Royal Society of Medicine*, **83**, 241–244.

LLOYD, G. G. (1980) Whence and whither "liaison" psychiatry? *Psychological Medicine*, **10**, 11–14.

MAGUIRE, P. & SELLWOOD, R. (1982) A liaison psychiatry service for mastectomy patients. In *Medicine and Psychiatry: A Practical Approach* (eds F. H. Creed & J. M. Pfeffer), pp. 377–395. London: Pitman.

MASON, A. S. (1975) Critical review of the psychiatric services: a physician's view. *Medicine* (second series), **11**, 510–512.

MAYOU, R. A. (1989) Consultation liaison psychiatry: an international perspective. *Psychiatry Clinical Update*. Crawley: Upjohn.

—— & LLOYD, G. (1985) A survey of liaison psychiatry in the United Kingdom and Eire. *Bulletin of Royal College of Psychiatrists*, **9**, 214–217.

——, ANDERSON, H., FEINMANN, C., *et al* (1990) The present state of consultation and liaison psychiatry. *Psychiatric Bulletin*, **14**, 321–325.

—— & SMITH, E. B. O. (1986) Hospital doctor's management of psychological problems. *British Journal of Psychiatry*, **148**, 194–197.

MEZEY, A. G. & KELLET, J. M. (1971) Reasons against referral to the psychiatrist. *Postgraduate Medical Journal*, **47**, 315–319.

PFEFFER, J. M. (1982) The consultation process. In *Medicine and Psychiatry: A Practical Approach* (eds F. H. Creed & J. M. Pfeffer), pp. 70–85. London: Pitman.

PILOWSKY, I. & BARROW, C. G. (1990) A controlled study of psychotherapy and amitriptyline used individually and in combination in the treatment of chronic intractable, 'psychogenic' pain. *Pain*, **40**, 3–19.

RAMIREZ, A. J. (1989) Liaison psychiatry in a breast cancer unit. *Journal of the Royal Society of Medicine*, **82**, 15–17.

RODIN, G. & VOSHART, K. (1986) Depression in the medically ill: an overview. *American Journal of Psychiatry*, **143**, 696–705.

ROYAL COLLEGE OF PSYCHIATRISTS (1988) Guidelines for training in liaison psychiatry. *Bulletin of the Royal College of Psychiatrists*, **12**, 389–390.

RUSSELL, G. F. M. (1973) Will there be enough psychiatrists to run the psychiatric service based on the district general hospital? In *Policy for Action* (eds R. Cawley & G. McLachlan), pp. 111–116. London: Oxford University Press.

SARTORIUS, N. (1987) Mental health policies and programs for the twenty-first century: a personal view. *Integrative Psychiatry*, **5**, 151–158.

SELTZER, A. (1989) Prevalence, detection and referral of psychiatric morbidity in general medical patients. *Journal of the Royal Society of Medicine*, **82**, 410–412.

SENSKY, T., GREER, S., CUNDY, T., *et al* (1985) Referrals to psychiatrists in a general hospital – comparison of two methods of liaison psychiatry: preliminary communication. *Journal of the Royal Society of Medicine*, **78**, 463–468.

SMITH, G. R., MONSON, R. A. & ROY, D. C. (1986) Psychiatric consultation in somatizaton disorder. A randomized controlled study. *New England Journal of Medicine*, **314**, 1407–1413.

THOMAS, C. J. (1983) Referrals to a British liaison psychiatry service. *Health Trends*, **15**, 61–64.

TOREM, M., SARAVAY, S. M. & STEINBERG, H. (1979) Psychiatric liaison: benefits of an 'active' approach. *Psychosomatics*, **20**, 598–611.

WORLD HEALTH ORGANIZATION (1978) *Mental Disorders: Glossary and Guide to their Classification in Accordance with the Ninth Revision of the International Classification of Diseases* (ICD–9). Geneva: WHO.

—— (1992) *International Classification of Diseases* (10th edn) (ICD–10). Geneva: WHO.

*Francis Creed, MD, FRCP, FRCPsych, *Professor of Community Psychiatry, Department of Psychiatry, Rawnsley Building, Manchester Royal Infirmary, Oxford Road, Manchester M13 9WL*; Elspeth Guthrie, MD, MRCPsych, *Lecturer, Department of Psychiatry, Manchester Royal Infirmary*; Dawn Black, MD, MRCPsych, *formerly Lecturer, Department of Psychiatry, Manchester Royal Infirmary, now Consultant Psychiatrist, Hope Hospital, Salford*; Mark Tranmer, BSc, *Department of Psychiatry, Manchester Royal Infirmary*

*Correspondence