Effects of a community mental health service on the practice and attitudes of general practitioners

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SUMMARY. Recent years have seen closer links developing between general practitioners and mental health specialists. A study was undertaken in Manchester to determine the effects of a new community mental health service on the practice and attitudes of general practitioners. Ten doctors had access to the community based psychiatric team over a three year period while another 10 doctors continued to use hospital services. Those with access to the team were significantly more satisfied with the specialist support services, and were more likely to give high priority to community psychiatric nurses and psychiatric social workers working as part of a primary health care team than those without access to the service. Those with access were more willing than those without access to share with psychiatrists the care of patients with chronic neurotic disorders. The community mental health team was considered particularly helpful in reducing the burden posed by patients with neurotic and psychosocial problems, but this resulted in the general practitioners doing less counselling themselves. The study did not find that the new service had an effect on the general practitioners' ability to detect or manage psychiatric illness.

Keywords: community mental health care; open access services; interprofessional relations; workload; doctors' attitude.

Introduction

THE general practitioner is a central figure in the coordination of community based care for psychiatric patients. ^{1,2} The majority of patients with psychiatric morbidity are managed in primary care, although a significant proportion of the morbidity in the population is not identified. ³ If psychiatry is to broaden its remit to the public health domain and if good care for patients outside institutions is to be a reality then the interest and cooperation of general practitioners are of paramount importance. In 1966 Michael Shepherd noted that 'administrative and medical logic alike suggest that the cardinal requirement of the mental health services in this country is not a large expansion and proliferation of psychiatric agencies, but rather a strengthening of the family doctor in his therapeutic role'. ⁴

In recent years cooperation between general practitioners and

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psychiatrists in providing care in the community has been the subject of much research.⁵⁻⁷ Direct contact between general practitioner and service deliverer makes a marked difference in general practitioners' perceptions of the service from all professionals^{6,7} but perhaps most strikingly in their satisfaction with social work services, an area of service which has often been criticized.⁸

Direct referral to community psychiatric nurses working from hospital or within primary care teams is highly valued by general practitioners,^{6,7} but deficiencies in feedback and communication are common findings. With greater involvement of psychiatrists at the primary care level general practitioners are anxious about the increased workload that might result, for example, closer liaison may lead to increased recognition of disorder, which may be left to general practitioners to treat.^{6,9} They also fear erosion of their clinical freedom and central role in management, particularly as regards neurotic patients.^{6,9} The liaison—attachment model of working with psychiatrists in primary care seems the most popular although this has never been compared with a traditional hospital based service.¹⁰

For psychiatric illness to be effectively managed it must first be recognized. There are wide variations in the ability of general practitioners to recognize psychological distress in their patients and the accuracy with which they do so.¹¹ High coefficients of recognition have been related to doctors' interviewing skills and their interest in psychiatry.¹¹ Improving the recognition of psychological illness at the primary care level is an important aim of strategies in community mental health care.

The study was carried out between 1987 and 1991 and its first aim was to determine the effect of a new community based psychiatric team on recognition and management of psychiatric disorder by general practitioners. Secondly, the study aimed to investigate general practitioners' satisfaction with the new service, the usefulness of different professionals within the team, communication with and support by the team and general practitioners' attitudes to their own role in the management of patients with different psychiatric illnesses. These findings were compared with those of a group of general practitioners using the traditional hospital based service.

Background

Since 1988 a community based mental health team has been working with general practitioners in Wythenshawe, south Manchester. The organization and development of the service is described elsewhere. The team comprises two community psychiatric nurses, a psychiatric social worker, an occupational therapist and a clinical psychologist, based at a local community health centre, separate from all practices geographically. Cover by a psychiatrist is provided from weekly clinics in the general practices by two consultants and three senior registrars.

General practitioners are able to refer patients between the ages of 16 and 65 years direct to the team and referrals are then allocated to a key worker at weekly allocation meetings. Alternatively, patients can be discussed at primary care team meetings attended by mental health workers rather than being formally referred. The traditional service is based at the district general hospital unit four miles away.

Method

General practitioners were divided into two groups and were well matched in terms of mental health service use prior to the onset of the study. The groups were then randomly allocated to continue to have sole access to the traditional hospital based service or to the additional service provided by the new community mental health team which started on 1 January 1988.

Assessing clinical work

In November and December 1987, each doctor allocated to have access to the new community health team completed a '100 patient form' on a series of 100 consecutive patients attending the surgery before the start of the new service. Those using the traditional hospital based service completed the '100 patient form' in January and February 1988. Both groups repeated the '100 patient form' in October 1990 to March 1991. For simplicity, the two study periods are considered to be 1988 and 1991. Patients were rated for the presence or absence of psychiatric morbidity and for the level of psychological disorder making a significant contribution to that particular consultation. Ratings of 0 and one indicated no or sub-clinical psychological disorder present. Ratings of two to four represented increasingly severe clinically significant psychological disorder. For ratings of two or more the general practitioner indicated the clinical diagnosis and treatment offered, using precoded ratings. The diagnosis given and treatments offered to patients could then be compared between those doctors with and without access to the mental health team for both years.

The 28-item general health questionnaire, used to estimate prevalence of psychiatric morbidity in practice populations, ¹³ was administered to the first 60 of both of the series of 100 patients rated by each general practitioner. The questionnaires were administered by research assistants before the patient went in to the appointment with the doctor.

Variables describing each doctor's performance in detecting psychiatric morbidity could then be calculated using the ratings from the form and estimated prevalence of disorder from the general health questionnaire. Details of calculations are described elsewhere. 14 These variables included: conspicuous psychiatric morbidity — the percentage of patients considered by the doctor to have clinically significant psychological disorder; doctor-general health questionnaire correlation — Spearman's rank correlation coefficient (rho) used to measure the doctor's ability to rate disturbance congruently with the patient's symptom level; and an identification index - a measure of the doctor's ability to detect symptomatic patients as ill. The identification index is related to accuracy in that it measures a general practitioner's ability to identify patients with high general health questionnaire scores as cases. If a general practitioner identifies everyone as having psychological disorder, all patients with high scores will be identified, but so too will those with low scores, giving an identification index of greater than one.

Satisfaction and attitudes

Between October and December 1991, after the team had been running for more than three years, each general practitioner was interviewed by R W using a semi-structured interview. This covered: contact and communication between the doctor and different professionals, and satisfaction and usefulness of service provision; attitudes to care for patients with different categories of psychiatric illness and the helpfulness of specialist services in aiding management; and a subjective assessment of change in individual practice over the study period. General practitioners used five-point rating scales to answer most of the questions. Comments were recorded verbatim and coded afterwards.

Analysis

Regarding detection of psychological disorder, analysis of variance was used to investigate changes in conspicuous psychiatric morbidity, doctor-general health questionnaire correlation and identification index that might have occurred owing to the presence of the team. A log transformation was performed first to ensure normal distribution of data. Dependent groups were analysed using the Wilcoxon test for matched pairs and independent groups by the Mann-Whitney U or chi square tests. The pooled data on diagnoses made and treatments offered by each group of doctors were analysed by three way analysis of variance using a hierarchical loglinear transformation. The responses of general practitioners to the questionnaire on satisfaction and attitudes were analysed by the Mann-Whitney U or chi square tests, as appropriate. All procedures were carried out using the SPSS.PC software package.

Results

Respondents

Twenty two general practitioners based in seven practices in a council estate in south Manchester agreed to take part in the study. All practices serve a population drawn from the same area in Manchester and thus cover a similar ethnic and socioeconomic mix. Two general practitioners completed the initial ratings but left the area during the study period; they are not included in the results. Two groups of 10 general practitioners remained and there were no significant differences between the two groups in terms of age, sex, time in general practice in the area and postgraduate training in psychiatry. The mean age of the general practitioners was 45 years, range 34-65 years. In each group four of the doctors were women and six were men. The mean time in general practice in the area was 12 years, range five to 35 years. One of the doctors with access to the new team and five doctors continuing to have access only to the hospital based service had postgraduate training in psychiatry.

Detection of psychological disorder

General practitioners with and without access to the new team considered approximately one quarter of the patients to have psychological disorder, and there was a significant fall in conspicuous psychiatric morbidity over the study period in both groups (Table 1). Wide variations between general practitioners in ability to detect psychological disorder is shown by the large ranges and standard deviations in both doctor-general health questionnaire correlation and identification index. For Spearman's rank correlation coefficient, a score of one would have indicated perfect correlation between general practitioners' ratings and patients' general health questionnaire scores. The mean values for the 10 general practitioners in each group were low, but the range was wide, indicating that some doctors were good at rating psychological disturbance congruently with symptom scores, and some less so. Both groups of doctors showed a reduction in their ability to detect symptomatic patients as ill (identification index) over the study period but this only reached significance for general practitioners without access to the team.

Diagnosis and treatment

There were no significant differences between the groups in either year in the diagnoses made. Over the study period general practitioners with access to the mental health team gave significantly fewer patients counselling: 13.7% of 981 patients were given counselling in 1988 compared with 9.0% of 845 patients in 1990, P < 0.01). Comments concerning counselling included: the community team did it better; the new contract for general practitioners left them less time to counsel patients themselves; and

Table 1. Ability of the 10 doctors with access and the 10 without access to the mental health team to detect patients with psychological disorder at the introduction of the team and three years later.

	GPs with GPs with access to access team team			to	
	1988 (n = 981)	1991 (n = 845)	1988 (n = 955)	1991 (n = 868)	
Conspicuous psychiatric morbidity (%) ^a	25.3	23.3 **	27.2	24.3 **	
Doctor-general health questionnaire correlation ^b					
Mean	0.34	0.31	0.30	0.20	
Standard deviation	0.16	0.12	0.15	0.14	
Range	0.04 to 0.53	0.12 to 0.57	-0.03 to 0.50	-0.09 to 0.41	
Identification index ^c					
Mean	0.61	0.55	0.63	0.49 *	
Standard deviation	0.21	0.29	0.36	0.24	
Range	0.16 to 0.99	0.06 to 0.99	0.28 to 1.30	0.23 to 1.03	

n = number of patients rated by each group of GPs. *Percentage of patients recognized as having clinically significant psychological disorder. *Spearman's rank correlation coefficient of GPs' ability to rate congruently with patients' symptom level. *GPs' ability to detect symptomatic patients as ill. One way analysis of variance for changes between 1988 and 1991; *P<0.05, **P<0.01.

referring to the team for counselling saved time. Doctors not using the mental health team were prescribing benzodiazepines to more patients than those with access to the team at the start of the study (2.2% of 955 patients and 1.6% of 981 patients, respectively) but there was a significant fall in the number of patients prescribed benzodiazepines by those without access over the two year period (to 0.8% of 868 patients, P < 0.01).

Satisfaction with services and attitudes to care

Doctors with access to the community mental health team were significantly more satisfied overall with the service provided by all professional groups than those with access to traditional hospital services (Table 2). Doctors using the mental health team were significantly more satisfied with the speed of response to

referrals and the quality and availability of information received following referral than the doctors not using the service (Table 2). When asked what priority they would give to each professional if they were to set up a team to work with them in primary care, seven of the doctors with access to the mental health team indicated that the community psychiatric nurse was essential, compared with three doctors without access to the new team (Mann Whitney U test: P < 0.05). Five doctors with access to the mental health team and no doctors without access thought that the psychiatric social worker was essential in a team in primary care (P < 0.01). Only two doctors without access gave high priority to occupational therapists compared with six doctors with access ranking them as of high priority or essential. There was a non-significant trend for doctors without access to the team to

Table 2. Satisfaction with service provided by different professional groups among general practitioners with and without access to the community mental health team.

	No. of GPs with (without) access to the team expressing opinion on services provided by:									
	Psyc	hiatrist	Clinical psychologist		Occupational therapist		Community psychiatric nurse		Psychiatric social worker	
Overall satisfaction										
Displeased	0	(0)**	1	(7)**	0	(1)**	0	(3)**	0	(1)**
Mostly dissatisfied	0	(1)	0	(1)	0	(0)	0	(4)	0	(4)
Mixed/neutral	1	(5)	1	(2)	2	(9)	0	(2)	0	(4)
Mostly satisfied	3	(4)	3	(0)	2	(0)	2	(1)	1	(1)
Pleased	6	(0)	4	(0)	6	(0)	8	(0)	9	(0)
Satisfaction with speed of response to referral										
Displeased	0	(2)**	1	(0)*	0	(0)*	. 0	(0)**	0	(0)**
Mostly dissatisfied	0	(1)	0	(0)	0	(0)	0	(1)	0	(1)
Mixed/neutral	0	(4)	2	(10)	3	(10)	1	(9)	1	(8)
Mostly satisfied	5	(3)	4	(0)	1	(0)	3	(0)	2	(1)
Pleased	5	(0)	2	(0)	5	(0)	5	(0)	7	(0)
Satisfaction with information received following referral	7									
Displeased	0	(0)*	0	(0)**	0	(0)*	0	(1)**	0	(1)**
Mostly dissatisfied	0	(0)	0	(0)	Ö	(0)	0	(2)	Ö	(0)
Mixed/neutral	0	(2)	2	(9)	3	(10)	1	(6)	1	(8)
Mostly satisfied	3	(7)	5	(1)	1	(0)	2	(1)	2	(1)
Pleased	7	(1)	2	(0)	5	(0)	7	(0)	7	(0)

Mann Whitney U test; *P<0.05, **P<0.01. *Quality and availability of information.

give a higher priority to psychiatrists and clinical psychologists.

Doctors with access to the team were significantly more satisfied with services overall than doctors with access to hospital services only for all their patients, but particularly for patients with chronic illness, acute neurosis and psychosocial problems (Table 3). Those with access to the mental health team were significantly more likely than those without to find services helpful in reducing the burden of care for patients with psychosocial problems and acute and chronic neurosis. The perceived helpfulness of services in reducing the burden of care for acutely psychotic patients was similar in both groups and was generally thought to be considerable. Doctors with access to the specialist service were significantly more likely to want to share the care of their chronic neurotic patients with the team (Table 3). The majority of general practitioners in each group thought that responsibility for care of chronic psychotic patients should be shared by general practitioners and specialist psychiatric services.

Although both groups of doctors valued as very useful personal contact with all professionals for advice and discussion of cases, those with access to the mental health care team were significantly more likely to have had personal discussions with all professionals. For example, nine doctors with access had had a telephone discussion with a psychiatric social worker compared with two doctors without access (P<0.01) and nine doctors with access had had face to face contact with a psychiatrist compared with one doctor without (P<0.01). Nine doctors without access had undertaken domiciliary visits with psychiatrists in the last 12 months compared with five doctors with access (P<0.05); one general practitioner commented that this was the only way to get a patient seen quickly.

Nineteen doctors favoured a liaison model of care, with the consultant psychiatrist visiting the practice to see and discuss patients. The one doctor who did not thought that it was impractical owing to the practice's small list size and lack of space in the practice.

Although general practitioners with access to the community team were more likely to have changed their views in favour of community psychiatry and shared care over the study period and to have become more interested in psychiatry than doctors without access, these differences were not significant.

Discussion

The evaluation of the community mental health team in south Manchester provides an opportunity to compare the work patterns and opinions of general practitioners working with the same population and in the same geographical area but with access to different models of specialist care provision. Before the community based service started, the doctors in the study had similar patterns of service use and had all expressed reasonable satisfaction with the available service. ¹² Any differences in satisfaction and attitudes more than three years later can therefore be attributed to the changes in service provision.

The findings suggest that a team approach to psychiatric care is likely to be more satisfactory for general practitioners than traditional hospital based services. Effective cooperation between general practitioners and specialist psychiatric services, and better communication and easy access to advice and discussion, facilitate the team approach. The findings reflect the preferences expressed by general practitioners in previous studies^{6,7} and partly allay the fear of loss of autonomy that has been expressed. This liaison model improves communication between professionals and provides a level of support which is helpful but not obtrusive

The skills of psychiatric social workers and community psychiatric nurses were particularly valued, confirming the results of other surveys.^{6,7} A report on the work of community psychiatric nurses indicates that in order for the work of these nurses to be targeted at client groups which will benefit most, community psychiatric nurses should be based within a multidisciplinary specialist team.¹⁵ The team evaluated in the present study provides a prototype for just such an approach based in primary

Table 3. Attitudes towards care for different groups of psychiatric patients among general practitioners with and without access to the community mental health team.

	No. of GPs with (without) access to the team expressing attitudes about care of patients with:									
	Acute neurosis		Acute psychosis		Chronic neurosis		Chronic psychosis		Psychosocial problems	
Satisfaction with services										
Displeased	0	(0)**	0	(1)*	0	(1)**	0	(1)**	0	(2)**
Mostly dissatisfied	0	(0)	0	(0)	0	(3)	0	(3)	. 0	(3)
Mixed/neutral	0	(7)	1	(1)	1	(5)	1	(5)	1	(4)
Mostly satisfied	2	(3)	2	(7)	4	(1)	4	(1)	3	(0)
Pleased	8	(0)	7	(1)	5	(0)	5	(0)	6	(1)
Helpfulness of services in reducing burden on GP										
No help at all	0	(0)*	0	(0)	0	(0)*	0	(1)	1	(2)**
Very little help	2	(3)	1	(1)	2	(5)	1	(2)	1	(4)
Some help	1	(6)	0	(2)	2	(5)	1	(3)	1	(4)
Considerable help	3	(1)	6	(5)	3	(0)	6	(3)	4	(0)
Great help	4	(0)	3	(2)	3	(0)	2	(1)	3	(0)
Appropriate responsibility of care										
Psychiatry totally responsible	0	(0)	4	(3)	0	(0)*	1	(0)	Oª	(0)
Psychiatry mainly responsible	0	(0)	0	(2)	0	(0)	1	(1)	0	(0)
Responsibility shared	5	(3)	5	(5)	5	(0)	2	(6)	4	(2)
GP mainly responsible	3	(4)	1	(0)	4	(7)	6	(3)	2	(2)
GP totally responsible	2	(3)	0	(0)	1	(3)	Ō	(0)	2	(6)

Mann-Whitney U test; *P<0.05, **P<0.01. aTwo non-respondents.

care. Easier access to psychiatric social workers and community psychiatric nurse services, which is of direct benefit to patients, resulted in doctors giving these services a high priority. Many general practitioners without access to the community team may have had little idea of the role of the occupational therapist in the management of psychiatric patients, accounting for the low priority given to this group. With increasing numbers of patients with chronic psychiatric illness in the community who have poor occupational skills, few daily living skills and poor motivation it suggests an unrecognized need for occupational therapists in primary care. ¹⁶

Of general practitioners without access to the mental health team most expressed some dissatisfaction with the traditional hospital service for patients with neurotic illness, chronic psychosis and psychosocial difficulties. This reflects a bias towards care of patients with more severe psychotic illnesses in the traditional service. The community team fills this gap in service provision and shares the burden of care for these patients. However, the effects of the service on relieving the burden on general practitioners of patients with psychiatric illness does not necessarily reflect the actual needs status of these patients. A patient with neurotic illness who may be a frequent attender may appear to be much more obviously in need of care than a patient with chronic schizophrenia who never attends the surgery.

The study shows that general practitioners do want to take responsibility for patients with severe chronic mental illness living in the community. Adequate training of doctors in the monitoring of patients with chronic psychiatric illness, particularly chronic psychotic illness, and the provision of support services are vital if care is to be effective.

The '100 patient form' can be seen as a snapshot of attitudes to, and management of, patients with psychological distress by general practitioners and will be affected by pressures on the general practitioner as well as by changes in the actual psychiatric morbidity of the population. The 1990 contract for general practitioners was introduced during the study period. This may account for the decrease in psychiatric morbidity recognized by both groups in 1990. The values for conspicuous psychiatric morbidity in this study are similar to other studies.

Studies of group and individual teaching in interview techniques have demonstrated that it is possible to improve a doctor's ability to recognize psychological distress. 19 Postgraduate educational programmes increase the competence with which general practitioners manage depression.²⁰ Both these approaches require the doctor to be interested enough to spend time on such training programmes and therefore they may be bypassing those who need it most. Closer contact with psychiatrists and other mental health workers has no effect on recognition of psychiatric disorder and may indeed reduce doctors' involvement in psychological treatments. It is possible that by increasing a general practitioner's interest in psychiatry, contact with the team might have improved recognition of these disorders as improved recognition has been positively correlated with interest. 11 Although general practitioners did appear to be rather more interested in psychiatry at interview after working with the team, this difference was not significant. Three years may not be long enough for the effects of such close liaison to be apparent, however, it would seem likely that proactive teaching is required for doctors to learn new skills, rather than hoping to modify their approach to illness by more intangible means. The reduction in counselling by general practitioners with access to the mental health team may have important implications in terms of de-skilling of general practitioners. To prevent the de-skilling of general practitioners and to improve their role in the management of these disorders, active programmes of postgraduate education will have to accompany the close liaison between services.

The importance of supporting general practitioners in their role as primary carers by good communication with and ease of access to services should not be underestimated. However, it cannot replace a more active approach to teaching diagnostic and management skills if general practitioners are to increase their therapeutic role.⁴

Despite the enthusiasm of the general practitioners in this study for the new approach to mental health care described it has not proved possible to extend the service to the area as a whole because of financial constraints. This study adds to increasing evidence that this type of service is likely to be that most attractive to general practitioners spending any of their budget on mental health care provision. Service planners would do well to take heed.

References

- 1. Shepherd M. The management of psychiatric disorders in the community. *J R Soc Med* 1990; **83:** 219-222.
- Shepherd M. Primary care psychiatry: the case for action. Br J Gen Pract 1991; 41: 252-255.
- 3. Goldberg D, Kay C, Thompson L. Psychiatric morbidity in general practice and the community. *Psychol Med* 1976; **6:** 565-569.
- 4. Shepherd M, Cooper B, Brown AC, Kalton G. *Psychiatric illness in general practice*. London: Oxford University Press, 1966.
- Strathdee G. Psychiatrists in primary care: the general practitioner viewpoint. Fam Pract 1988; 5: 111-115.
- Bennett C. The Worcester development project: general practitioner satisfaction with a new community service. J R Coll Gen Pract 1989; 39: 106-109.
- Stansfeld SA. Attitudes to developments in community psychiatry among general practitioners. *Psychiatric Bull* 1991; 15: 542-543.
- Corney RH. Factors affecting the operation and success of social work attachment schemes to general practice. J R Coll Gen Pract 1980; 30: 149-158.
- Mitchell ARK. Psychiatrists in primary health care settings. Br J Psychiatry 1985; 147: 371-379.
- Creed F, Marks B. Liaison psychiatry in general practice: a comparison of the liaison attachment scheme and shifted outpatient clinic models. J R Coll Gen Pract 1989; 39: 514-517.
- Marks JN, Goldberg DP, Hillier VF. Determinants of the ability of general practitioners to detect psychiatric illness. *Psychol Med* 1979; 9: 337-353.
- Jackson G, Gater R, Goldberg D, et al. A new community health team based in primary care. A description of the service and its effect on service use in the first year. Br. J. Psychiatry 1993: 162: 375-384.
- on service use in the first year. Br J Psychiatry 1993; **162**: 375-384.

 13. Goldberg D, Williams P. A user's guide to the general health questionnaire. Windsor: NFER-Nelson, 1988.
- 14. Goldberg D, Huxley P. Mental illness in the community: the pathway to psychiatric care. London: Tavistock, 1980.
- 15. Gournay K, Brooking J. An evaluation of the effectiveness of community psychiatric nurses in treating patients with minor mental disorders in primary care. Final report to the Department of Health. Enfield: Middlesex University, 1992.
- Freeman HL, Bennett DH. Principles and prospects. In: Freeman HL, Bennett DH (eds). Community psychiatry. Edinburgh: Churchill Livingstone, 1991.
- 17. Department of Health and the Welsh Office. General practice in the National Health Service: a new contract. London: HMSO, 1989.
- Ormel J, Giel R. Medical effects of non-recognition of affective disorders in primary care. In: Sartorius N, Goldberg D, de Girolamo G, et al (eds). Psychological disorders in general medical settings. Berne, Switzerland: Huber-Hogrefe, 1990.
- Gask L, McGrath G, Goldberg D, Millar T. Improving the psychiatric skills of established general practitioners: evaluation of group teaching. *Med Educ* 1987; 21: 362-368.
- Rutz W, Wallinder J, Eberhard G. An educational program on depressive disorders for general practitioners in Gotland: background and evaluation. Acta Psychiatr Scand 1989; 79: 19-26.

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