

Group treatment of general practice anxiety problems

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SUMMARY. *This study examined the effects on anxiety levels and primary care team workload of group psychological treatment for anxiety compared with individual treatment. Patients making high demands on primary care services were selected for group treatment, following which demands for services were considerably reduced. Two types of group treatment were used: the anxiety support group required less staff time to run than the anxiety management group but neither treatment had a clinically significant impact on anxiety symptoms. Individual psychological treatment was more effective in reducing levels of anxiety but required slightly more staff time per patient. These findings show that there is no close correspondence between reduction of anxiety and reduction of service costs and underline the importance of evaluating treatment effects with reference to the specific objectives of treatment.*

Introduction

THE management of mental disorders, such as anxiety, places a great demand on primary care services. More consultations are spent on mental disorders than on any other category of problem, except respiratory disorders.¹ Service load — that is, consultations with general practitioners and patients' use of psychotropic medication — can be reduced by psychological treatment.² However, the service load from patients not receiving treatment is also reduced, albeit more slowly.^{3,4} Such findings suggest that psychological treatment in primary care is not cost-effective. Two approaches to decreasing the cost of intervention are specially trained nurses providing treatment⁵ and the treatment of patients in groups.^{6,7}

However, it cannot be assumed that effectiveness in reducing service demand is equivalent to effectiveness in reducing morbidity. Although neurotic patients make considerable demands on primary care services, the relationship between persistence of neurotic disorder and demand for services is far from clear. Increased consultation by patients with psychosocial problems is often quite short-lived,⁸ while neurotic illness appears more persistent in a general practice population. In one study⁹ only 24% of neurotic patients reported clear improvement after a year, with 52% showing variable morbidity and 25% chronic continuous symptoms. In general, demand for primary care is not simply a function of morbidity but is influenced by sociocultural, interpersonal and practical factors.¹⁰

This study examined the effects of group psychological treatment for anxious patients making heavy demands on primary care services. It was expected that the treatment would be quite effective in minimizing service costs. One possible disadvantage

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of group treatment is that it offers fewer opportunities to deal with patients' specific difficulties than individual treatment, which may dilute intended therapy effects. Hence the impact of group treatment on anxiety symptoms was compared with that of individual psychological treatment.

Method

Subjects

Anxious patients in contact with their general practitioner or another member of the health care team were referred for group psychological treatment. Referral of patients with longstanding anxiety problems was particularly encouraged, although patients with acute problems were not excluded. Each referral was assessed to establish that a clear-cut anxiety problem (for example, phobia or anxiety state) was present and that the patient seemed able to communicate and respond positively to the group situation.

The subjects who received group treatment were matched with patients who had received individual psychological treatment for anxiety. These were a series of 44 patients with anxiety disorders who attended a health centre clinic for treatment. Patients with concurrent psychiatric conditions such as depression, personality disorder and alcohol dependence were excluded, and matching then proceeded on the basis of sex and duration of illness. The matching procedure did not take into account the level of anxiety or how often the patients consulted their general practitioner.

Types of group treatment

The group-treated patients participated in one of two treatment groups which differed from each other in structure. Both groups met weekly for 90-minute sessions. The first group, the anxiety support group, did not offer a specific programme beyond an introductory talk about the nature of anxiety, its causes and prevalence. In 12 subsequent sessions participants discussed their problems and strategies for coping with them. This discussion was not structured except that one of the authors would be present to ensure the group ran smoothly and beneficially. For instance, the staff member would give less forthcoming group members opportunities to join in the discussion, facilitate group supportive processes and encourage discussion of coping methods.

The second group, the anxiety management group, was a closed group lasting for 11 sessions, each directed at a specific topic. Most of the sessions concentrated on anxiety management techniques such as relaxation, self-hypnosis and graded exposure. Patients' spouses attended the last session. The group was led by two of the authors (C.T. and I.L.), apart from two sessions on self-hypnosis given by one of the general practitioners in the practice.

Some group members wished to continue meeting after the groups ended and were encouraged to organize meetings themselves on a self-help basis. Some occasional meetings of this group were held and informal contact between a few of the members has continued.

Measures

The severity of anxiety problems was assessed using the trait scale of the state-trait anxiety inventory.¹¹ The inventory was

administered before and after intervention, and at the end of a follow-up period. In addition, all prescriptions and contacts with health centre staff were recorded for a year before and after the beginning of treatment. These contacts included the number of consultations with general practitioners and with other members of the primary care team, for example, the community psychiatric nurse, clinical psychologist, social worker or dietician. They did not include contact with health visitors or attendances at family planning and well-woman clinics.

Results

Patient characteristics

Fourteen patients in all attended group sessions although two were excluded from analysis because they had insufficient opportunity to benefit, having joined shortly before one group disbanded. The remaining patients were aged between 23 and 59 years (mean 39.7 years). Seven patients participated in the anxiety support group and five in the anxiety management group. Eight of them had been treated with anxiolytic medication for between one month and five years. There were 10 women and two men. The duration of their anxiety problems ranged from one month to 11 years (mean 4 years, median 2.5 years).

The matching procedure ensured that individually-treated patients also comprised 10 females and two males; duration of illness ranged from six months to 10 years (mean 4 years, median 2.5 years). The mean age was 33.6 years. Nine patients were taking psychotropic medication prior to treatment.

Anxiety levels and reported benefits

Ten of the group-treated patients and seven individually-treated patients completed the trait scale of the state-trait anxiety inventory both before and after treatment. Although the matching procedure had not taken the inventory scores into account, Table 1 shows that initial scores were similar for both types of treatment. Both sets of patients showed significant reductions in scores following treatment. However, group-treated patients still had anxiety levels much higher than the general population average,¹² while the scores of the individually-treated patients fell almost 20 points, reaching average levels. Since pre-treatment scores were similar, the two interventions were compared for effectiveness in reducing anxiety. The reduction in scores was significantly greater for individually-treated patients ($P < 0.001$).

One year after the end of treatment, eight of the group-treated patients and six of the individually-treated patients again completed the inventory. Average increases of 1.1 and 6.7 points respectively were found. The group-treated patients were no longer significantly less anxious than before treatment. However, the individually-treated patients remained less anxious than before ($P < 0.05$).

Ten of the 12 group-treated patients reported symptomatic improvement after treatment, describing both symptom reduction and adoption of new ways of managing anxiety. Comparable data were not available for individually-treated patients.

Table 1. Comparison of anxiety scores before and after treatment for group- and individually-treated patients.

	Mean (SD) anxiety scores	
	Pre-treatment	Post-treatment
Group-treated patients ($n=10$)	58.6 (5.3)	53.2 (7.4)*
Individually-treated patients ($n=7$)	59.0 (10.2)	40.9 (7.8)***

SD = standard deviation. * $P < 0.05$, *** $P < 0.001$.

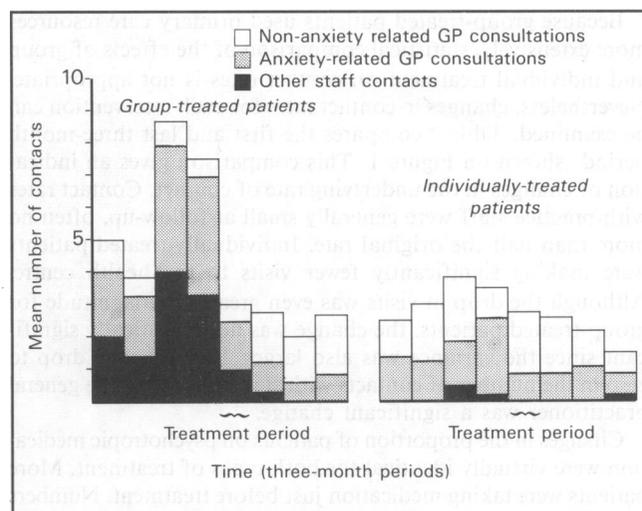


Figure 1. Three-monthly rate of contacts with health centre staff for group-treated ($n=12$) and individually-treated ($n=12$) patients.

Use of primary care resources

Figure 1 shows that the group-treated patients were accounting for much more staff time than individually-treated patients, especially in contacts with non-medical staff. Seven of them were being seen on a long-term basis by the community psychiatric nurse or clinical psychologist during the baseline year.

Both sets of patients showed an increased number of contacts with practice staff in the six months before treatment. This increase was most pronounced for the patients who subsequently received group treatment, averaging more than one contact per fortnight during this period.

Immediate reductions in anxiety-related contacts, by about two-thirds, followed the introduction of treatment in both sets of patients. The reductions were maintained over the nine months after treatment finished, with group-treated patients showing further decreases.

Table 2. Comparison of long-term changes in three-monthly contact rates with all practice staff for group- and individually-treated patients (first and last three-month periods shown on Figure 1).

	Mean (SD) no. of staff contacts	
	Baseline	Follow-up
<i>Group-treated patients (n = 12)</i>		
Anxiety-related GP consultations	2.0 (2.6)	0.75 (1.3)
Non-anxiety-related GP consultations	1.1 (1.6)	1.8 (1.8)
Other staff contacts	2.0 (2.7)	0 (0)*
Total	5.1 (5.3)	2.6 (3.2)
<i>Individually-treated patients (n = 12)</i>		
Anxiety-related GP consultations	1.3 (1.1)	0.7 (1.2)
Non-anxiety-related GP consultations	1.1 (1.5)	0.6 (0.6)
Other staff contacts	0 (0)	0.1 (0.3)
Total	2.3 (1.6)	1.4 (0.8)*

SD = standard deviation. * $P < 0.05$.

Because group-treated patients used primary care resources more extensively, statistical comparison of the effects of group and individual treatment on contact rates is not appropriate. Nevertheless, changes in contact rates for each intervention can be examined. Table 2 compares the first and last three-month periods shown on Figure 1. This comparison gives an indication of changes in the underlying rate of contact. Contact rates with practice staff were generally small at follow-up, often no more than half the original rate. Individually-treated patients were making significantly fewer visits to the health centre. Although the drop in visits was even greater in magnitude for group-treated patients, the change was not statistically significant since the variance was also larger. However, the drop to zero in the number of contacts with staff other than the general practitioner was a significant change.

Changes in the proportion of patients on psychotropic medication were virtually identical for both types of treatment. More patients were taking medication just before treatment. Numbers then decreased, remaining slightly less than at the outset.

Costs and savings

Notwithstanding differences in the content of treatment, group-treated patients received more hours of treatment (mean 12.50 hours per patient) than those attending individually (mean 7.08 hours). However, the amount of staff time needed to provide group treatment worked out at 5.75 hours per patient, slightly less than the time for individual treatment (7.08 hours).

Table 3 shows that patients averaged about five fewer visits to their general practitioner in the year following treatment. Contacts with other staff have been converted into hours to take account of the differences in length of treatment sessions (for example, group sessions lasted 90 minutes). Since pre-treatment contact with non-medical staff had been minimal for individually-treated patients, the treatment produced a net increase in non-medical staff costs. On the other hand the workload involved in group treatment was more than outweighed by a substantial reduction in other non-medical staff contacts. Thus group treatment produced a net saving in non-medical staff workload over the year.

Comparison of the two types of group treatment

Patients attending the anxiety support group achieved a slightly larger reduction in anxiety levels and visits to the health centre, when compared with the anxiety management group. These differences were not statistically significant. Anxiety support took an average of 4.50 hours of staff time per patient. Average net 'savings' per patient were 9.43 general practitioner consultations and 7.79 hours of non-medical staff time in the year following treatment. Both figures represent a 'saving' of more than 50% on the previous year. The average time taken in anxiety management was 7.50 staff hours per patient, while only 0.80 consultations per patient were 'saved' and there was a net increase of 0.10 non-medical staff hours.

Discussion

Because one of the aims of group treatment was to manage chronic high service-users, the group-treatment sample included a number of 'high users', while the individual-treatment sample contained none. The long-term cost of managing these patients was considerable, reaching a peak in a six-month 'crisis period' before treatment began, when some patients were averaging more than one health centre contact per week. Much of this demand was being met by the non-medical personnel such as the community psychiatric nurse. Where such support services are not available the general practitioner might normally carry more of this workload.

In the absence of a control group it is unclear to what extent demand for services may have altered without intervention. Furthermore, because of differences between the intervention samples, it cannot be demonstrated that any method was superior in controlling excessive use of primary care resources. Nevertheless, on a simple calculation of direct service costs (that is, primary care team time), impressive results were obtained with patients attending the anxiety support group. This group was cheaper to run than the group or individual interventions attempting to train anxiety management strategies. In the year after the group's introduction, contacts with general practitioners and other staff were more than halved. It was our impression that construction of a support group for 'high user' anxious patients helped to channel chronic help-seeking behaviour away from the primary care team.

However, neither form of group treatment had a clinically significant impact on anxiety symptoms. The small reductions obtained were not maintained at follow-up. Individual psychological treatment was clearly superior in bringing anxiety down to normal levels, with a considerable decrease still evident a year later.

These results show that there is no close correspondence between reduction of anxiety and reduction of service costs. Minimizing costs seems the more appropriate objective for those anxious patients who place a high demand on available resources. Typically they do not respond well to standard treatments but tend to become quite dependent upon them. A promising way of managing these patients may be to use group methods which aim to build non-professional supportive resources.

For most other anxious patients the main issue is how well treatment brings the disorder under control. Individual psychological treatment, emphasizing training of anxiety management methods, did this much more effectively than either of the group treatments. Previous trials of psychological treatment have provided less clear-cut evidence of treatment effectiveness.²⁻⁴ However, these studies attempted to evaluate outcome for all the various patients seen by the psychologist, encompassing a variety of treatment objectives and interventions. Use of more specific measures would facilitate identification of the problems with which psychological interventions are most effective. More precise evaluation of the contribution of clinical psychology in primary care would thus lead to concentration of effort and increased overall effectiveness.

Table 3. Staff workload per patient in the year before and the year after initiation of treatment.

	Mean number of GP consultations			Mean contact time with non-medical staff (hours)		
	Pre-treatment	Post-treatment	Net change	Pre-treatment	Post-treatment	Net change
Group-treated patients (n=12)	14.65	9.00	-5.65	10.58	6.90 ^a	-3.68
Individually-treated patients (n=12)	13.20	8.50	-4.70	0.50	7.18 ^a	+6.68

^aIncludes staff time needed to provide treatment.

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