

The evaluation of a mental health facilitator in general practice: effects on recognition, management, and outcome of mental illness

KHAVER BASHIR

BOB BLIZARD

ANNA BOSANQUET

NICK BOSANQUET

ANTHONY MANN

RACHEL JENKINS

SUMMARY

Background. Facilitation uses personal contact between the facilitator and the professional to encourage good practice and better service organisation. The model has been applied to physical illness but not to psychiatric disorders.

Aim. To determine if a non-specialist facilitator can improve the recognition, management, and outcome of psychiatric illness presenting to general practitioners (GPs).

Method. Six practices were visited over an 18-month period by a facilitator whose activities included providing guidelines and organising training initiatives. Six other practices acted as controls. Recognition (identification index of family doctors), management (psychotropic prescribing, psychological consultations with the GP, specialist mental health treatment, and the use of medical interventions and investigations), and patient outcome at four months were assessed before and after intervention.

Results. The mean identification index of facilitator GPs rose from 0.51 to 0.64 following intervention, while that of the control GPs fell from 0.67 to 0.59 ($P = 0.046$). The facilitator had no detectable effect on management or patient outcome.

Conclusions. The facilitator improved recognition of psychiatric illness by GPs. Generic facilitators can be trained to take on a mental health role; however, the failure to achieve more fundamental changes in treatment and outcome implies that facilitator intervention requires development.

Keywords: facilitator; mental health; symptom recognition; symptom management; patient outcome.

Introduction

MOST psychiatric morbidity presenting in general practice is managed without recourse to specialists.^{1,2} Initiatives should

therefore be targeted at the primary health care team with a view to augmenting their role in mental illness.¹ Such initiatives may require general practitioners (GPs) to make adjustments in clinical practice and service organisation. Horder *et al*³ concluded that contact with other health professionals was particularly effective in bringing about change in the doctors' activities. Such personal contact lies at the heart of the 'facilitator' model. The facilitator forms a direct relationship with the primary care team members, encourages the assessment of current practice, offers resources to assist the process of change (for example, written guidelines), promotes both teamwork within the practice and links with external providers of care, and organises educational activity. Facilitators can modify favourably the behaviour of practice staff in relation to heart disease and stroke,⁴ cancer,⁵ and asthma.⁶ The model has not been previously applied to mental illness. In this project the aim was to evaluate whether a primary care facilitator without a specialist mental health background could improve the recognition, management, and outcome of common mental disorders presenting to family doctors.

Method

Six practices received help from the facilitator over a period of 18 months while a further six (control) practices had no additional input. Both facilitator and control practices were evaluated before and after intervention.

Setting

The study was confined to Parkside Health Authority in central London. During the study period (1991–1995), GP services in Parkside were administered by Kensington & Chelsea and Westminster Family Health Services Authority (FHSA). The latter body employed the facilitator, thereby giving her a formal status for negotiating with practices.

Selection of practices

Selection and treatment allocation was carried out by the FHSA in order to maximise participation. Of the 62 Parkside practices, 11 were excluded because they had under 1000 patients or were undergoing substantial upheaval (e.g. partnership break-up) or consisted of a single-handed doctor whose retirement was imminent. The remaining practices were classified as 'large' if they had more than 4000 patients and 'small' if they had fewer than this. Local data revealed an overrepresentation of small practices in Parkside compared with the picture nationally, so large practices were oversampled (see below).

Practices were listed in the FHSA directory by post code. The first large practice on the list was allocated to facilitator intervention and the second to control. The third was allocated to the lag control condition. (These practices were only evaluated after the intervention and so will not be referred to further in this paper.) This sequence was repeated until all large practices in the directory had been assigned. The small practices were subjected to the same procedure. Next, a representative of the FHSA contacted the allocated practices (in the order they appeared on the list) and asked if they would be willing to participate in the study on the

K Bashir, MRCP, MRPsych, lecturer, University Department of Psychiatry, Royal Free Hospital School of Medicine, London. B Blizard, MSc, medical statistician; A Mann, MD, MPhil, FRCP, FRCPsych, professor of psychiatry; and R Jenkins, MD, FRCPsych, senior lecturer, Section of Epidemiology and General Practice, Institute of Psychiatry, De Crespigny Park, London. A Bosanquet, MSc, research fellow; and N Bosanquet, MSc, professor of health policy, Department of General Practice, Imperial College, London. Submitted: 11 March 1999; Editor's response: 18 August 1999; final acceptance: 10 April 2000.

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basis of their allocation. This process continued until four large and two small practices had been recruited to the facilitator and control arms of the study.

The facilitator intervention

Facilitator's training. The facilitator had worked as a health visitor and as a primary care facilitator of physical illness but had no specialist experience in psychiatry. She underwent a six-month training programme supervised by a consultant psychiatrist (AM) prior to working with the study practices. This included familiarisation with evidence-based interventions derived from primary care psychiatric research. The use of a non-specialist facilitator was a deliberate choice, and indeed central to the whole project. The research question being posed was whether a generic facilitator could improve the standards of psychiatric care in general practice. If yes, then the model should be transferable so that all primary care facilitators could take up this task.

Activities within practices. After intervention practices completed the initial GP survey (see below), the facilitator made contact. A range of strategies was employed, including: audit of the recognition of mental illness by GPs and feedback of the results; provision of written materials, such as guidelines on the management of depression; and organisation of training initiatives, usually practice-based workshops. A more detailed description of the work of the facilitator has been published elsewhere.⁷

Measures

Recognition by the GPs. This was assessed by comparing ratings of the family doctor against patients' self-report of psychiatric symptoms on the 12-item version of the general health questionnaire (GHQ-12).^{8,9} Each item on the GHQ-12 was scored 0-0-1-1 and a total obtained by adding the items.⁹ A validation study in six of the project practices had revealed an optimal cut-off score of 2/3 and at this threshold the sensitivity was 76% and the specificity 74%.¹⁰ Patients scoring 3 or more were classed as GHQ cases (or high scorers). The GPs were asked to make psychiatric assessments of their patients using a 'physician scale': 0 = no psychiatric symptoms present; 1 = psychiatric symptoms that do not require GP intervention; and 2 = psychiatric symptoms present that require GP intervention. Patients rated as 1 or 2 were designated GP cases. The identification index¹¹ for each doctor was defined as:

$$\frac{\text{number of patients at index consultation who were high scorers on GHQ and GP cases}}{\text{number of high scorers (GHQ) } \times \text{ sensitivity}}$$

Management. The medical notes provided information on psychotropic prescribing, psychological consultations with the GP, specialist mental health treatment, and use of physical treatments and investigations. These were considered to be important facets of the way in which family doctors manage mental illness. Operational criteria were developed for each variable to improve the reliability of data collection.

Patient outcome. Patient outcome in relation to psychiatric morbidity was assessed by asking subjects to complete the GHQ on a second occasion, four months after the index consultation.

Procedures

Assessment of practices took place before and after facilitator intervention (Time 1 and Time 2 respectively). At both time

points a GP survey, screening of notes, and a postal survey were carried out.

GP survey. Doctors working three or more surgeries per week completed the physician scale on at least 40 consecutive attenders, basing this on the current (index) consultation. Eligible subjects were aged 18 to 74 years old and registered with the practice for continuing care. The nature of the study was explained using a handout signed by their GP. They were asked to complete the GHQ and return this to the researcher before seeing the doctor. The identical procedure was adopted at Time 1 and Time 2, though with a different cohort of attenders on each occasion.

Screening of notes. The manual and computerised records of patients taking part in the GP survey were examined to collect data on management during the four months after the index consultation.

Postal survey. The GP survey cohort were posted a further GHQ at four months. Response was increased by sending a reminder after three weeks, then contact by telephone.

Statistical methods

Sample size calculation. The identification index was considered the main outcome measure in the present study. Marks *et al*¹² in their large multipractice survey found the mean identification index to be approximately 0.5, with a standard deviation (SD) of 0.19. It was calculated that a sample size of 12 GPs per group would give 85% power at the 5% level of significance to detect an improvement in the identification index from 0.5 to 0.75, assuming SD = 0.19. No information was available on intra-class correlation (the similarity between GPs within practices in terms of identification index) so this was assumed to be 0 for the above power calculation. From baseline data the intra-class correlation was 0.4, which meant that the sample size would need to be increased by a factor of 1.8 to achieve the same power.¹³ The mean identification index at Time 1 was 0.45, with SD = 0.20. Substituting these values in the original power calculation and making the adjustment for the lack of independence meant that 16 GPs were needed in each arm of the trial.

Analysis

Parametric tests were used where data met assumptions of normality. Identification index, the main response variable, was analysed by GLM procedure in SPSS Version 7 for Windows.¹⁴ This performs an analysis of co-variance that controls for the initial value and the cluster effect of practice membership. Changes in GP personnel during the study (see below) were dealt with by matching the doctors who left their practices between Time 1 and Time 2 with their replacements. This was considered reasonable because the facilitator was aiming to affect the culture of the practice so it did not matter if the replacements did not have the full intervention.

Management variables (all categorical) were analysed using GLIM.¹⁵ The effect of time (pre-and post-treatment), group (facilitator versus control), and GHQ (case versus non-case) were entered as two-level factors, with each outcome variable defined as binary with a logit link function.

Patient outcome, measured as the proportion of GHQ cases at the index consultation who had become non-cases at four months, was examined for any group by time effect using GLIM.

Results

Study site and subjects

Nine practices refused to participate. They did not differ from the

12 study practices in terms of list size or number of principals. The facilitator and control practices were similar in terms of list size, numbers of principals and practice nurses, and the proportion of practices employing a counsellor.

At Time 1, 35 GPs (16 facilitator, 19 control) and at Time 2, 37 GPs (16 facilitator, 21 control) took part in the study. Three Time 1 doctors (two facilitator, one control) had left their practices and were replaced by new doctors prior to the start of the Time 2 evaluation. In addition, two control practices each took on an extra doctor during the project. There were no major differences between the facilitator and control GPs in terms of sex, ethnicity, year of qualification, and possession of the MRCP.

At Time 1, 1485 patients took part in the GP survey, of whom 1006 (67.7%) returned the postal questionnaire four months later and 1262 (85.0%) had their notes examined. At Time 2, 1611 took part in the GP survey, of whom 1038 (64.4%) returned the four-month postal questionnaire and 1312 (81.4%) had their notes examined.

Baseline measures

There were some differences in the identification index at Time 1: control GPs had a mean score of 0.67 (SD = 0.26) compared with facilitator doctors with a mean of 0.51 (SD = 0.23); there was little variation in the indices of management at baseline. Patients in the control practices had a better psychiatric outcome at Time 1: of those attenders who were GHQ cases at the index consultation, 43.2% had become non-cases at four months in the control group compared with 38.5% in the facilitator group.

Outcome after intervention

The mean identification index of the facilitator GPs rose from 0.51 at Time 1 to 0.64 at Time 2, while that of control GPs fell from 0.67 to 0.59 ($F = 4.99$, $P = 0.046$) (Table 1).

The facilitator had no impact on psychotropic prescribing, psychological consultations with the GP, contact with specialist mental health services or use of medical treatment and investigations (Table 2). There was no evidence that facilitation resulted in treatments being better targeted at high scorers on the GHQ.

Patient outcome at four months was also unaffected by facilitator intervention. Although patients who were cases on the GHQ at the index consultation showed a high rate of recovery by four months (where recovery is defined as becoming a non-case) there was little between-group variation in this phenomenon over the study.

The mean GP consultation rate during the four months following the index consultation for patients in the facilitator practices was 2.1 at Time 1 and 1.8 at Time 2, while for patients in the control practices the rate was 2.0 at both time points. Over the same four months the mean referral rate (which incorporated new referrals, patients who had been referred prior to the study but were seen during the four months, and self-referrals) was 0.74 at Time 1 and 0.92 at Time 2 for facilitator patients and 0.78 and 0.92 in the controls.

Discussion

Table 1. Mean GP identification index (95% CI) in facilitator and control practices before and after intervention.

	Time 1	Time 2
Facilitator (n = 16)	0.51 (0.39–0.63)	0.64 (0.51–0.76)
Control (n = 19)	0.67 (0.54–0.80)	0.59 (0.41–0.76)

This study demonstrated that a non-specialist facilitator can improve the ability of doctors to recognise mental illness. Improved recognition was not associated with greater workload for primary or secondary services.

The study failed to show any improvement with facilitator intervention in either the management of mental illness by GPs or the outcome for patients. However, as the study was powered to detect changes in recognition rather than in management or patient recovery, it is possible that beneficial effects of facilitation failed to be detected. The study period was also associated with considerable stress for primary care staff owing to changes in contracts and other National Health Service (NHS) reforms. Implementing change in general practice is likely to be more successful where there are 'slack resources'.¹⁶

Doctors in the control practices showed a reduction in their ability to recognise mental illness during the study. The stresses already mentioned may have resulted in GPs being less prepared (or having less time and energy) to search for psychological problems. The study findings could then be explained in terms of entirely negative effects of NHS changes in the control group and a mixture of negative NHS changes and the positive effects of facilitation in the intervention group.

Certain methodological issues require further comment. A systematic allocation of practices was carried out. Altman¹⁷ has indicated that systematic methods are inferior to randomisation because of their openness. In the study, the allocation schedule was known to the person recruiting practices with the potential for bias. On balance, the research team accepted the systematic method on pragmatic grounds, believing that the advantages of cooperation with the FHSA outweighed the disadvantages in terms of the weaker study design. Although the main outcome measure was at the level of the doctor it was decided to allocate by practice. Allocation by GP would have meant the facilitator working with many more practices and there would have been a high risk of contamination.

Conclusions

The facilitator achieved modest improvement in the recognition of mental illness by family doctors, but no demonstrable effects on management or patient outcome. The model shows potential but requires development.

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Table 2. Indicators of management in facilitator and control practices before and after intervention. Figures are percentage of patients receiving each treatment.

	Facilitator		Control	
	Time 1 (n = 588)	Time 2 (n = 571)	Time 1 (n = 674)	Time 2 (n = 741)
Prescribed benzodiazepine	8.8	6.5	10.4	8.5
Prescribed antidepressant	7.3	9.6	6.7	9.2
At least one psychological consultation with a GP	20.6	20.5	19.1	22.4
Receiving specialist mental health treatment	8.2	8.9	7.9	9.3
At least one physical investigation	46.3	47.5	45.4	45.6
At least one hospital contact (not psychiatrist)	39.8	45.0	42.6	45.7

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Address for correspondence

Dr Khaver Bashir, University Department of Psychiatry, Royal Free Hospital School of Medicine, Pond Street, London NW3 2QG.