

Stress self-help packages in primary care: a controlled trial evaluation

BRIAN G. KIELY, BSc, MApp Psy, MSc
Clinical Psychologist, North Warwickshire Health Authority

IAN G. McPHERSON, MA, MSc
Principal Clinical Psychologist, North Warwickshire Health Authority

SUMMARY. A controlled trial study which examined the clinical effectiveness of a stress self-help package administered by general practitioners to patients presenting with psychological problems which were potentially stress-related is described. Patients were randomly allocated to one of two groups: existing general practitioner treatment with or without the use of the package. Significant advantages were found for patients who received the package compared with controls in both their level of symptoms at three-month follow-up and their rate of consulting for psychological problems in the three-month post-treatment period compared with the three-month pre-treatment period. The potential use of such packages in the treatment of psychological problems in primary care is discussed.

Introduction

THE majority of psychological problems are dealt with at the primary care level. This presents a considerable challenge to mental health professionals who have traditionally operated from a hospital base. Not only must they shift the emphasis of their service from hospital to community, they must also recognize that the skills and strategies they have been accustomed to using may not be entirely appropriate in this new setting. Clinical psychologists have started to address these issues^{1,2} and a number of reports of alternatives to individual therapy have emerged. These have emphasized group approaches^{3,4} which appear to be both clinically beneficial and to make more effective use of available resources. However, these approaches require patients to have direct contact with psychologists and, given the prevalence of psychological problems and the small number of psychologists in many parts of the country, this limits their applicability.

Another approach which may overcome some of these difficulties is the development of self-help material which can both inform patients about the nature of their problems and suggest ways of dealing with them. Booklets of this type have been used successfully in general practice for other problems^{5,6} and their use in commonly occurring conditions has been advocated.⁷ Mental health problems may be regarded as far too complex for this approach but many of the problems for which people seek help in general practice are reactions to stressful life circumstances. As a result of the prejudices and fears which still surround mental health, people do not discuss psychological problems in the same way as they discuss physical problems and they may be less informed about common anxiety symptoms and how to deal with them than they are about equally com-

mon physical symptoms. The development of self-help booklets in this area could, therefore, be of considerable benefit, particularly in supplementing the treatment and advice given by the general practitioner during the consultation.

The idea of investigating this approach resulted from a discussion of how clinical psychologists already working with a particular group practice might contribute to the treatment of a wider range of patients than those who could be seen for individual therapy. The major area of need was identified as those patients presenting with stress-related problems. Although there are a number of books and pamphlets on this topic, no controlled evaluation of their use has been published. The aim of this study was to evaluate the impact of a stress self-help package used as an adjunct to normal treatment provided by general practitioners for stress-related problems. The package is produced by the Stress Syndrome Foundation, and consists of six separate leaflets which contain information on the causes, consequences and control of stress. (The package is available from The Stress Syndrome Foundation, Cedar House, Yalding, Kent ME18 6JD.) The impact of the package was assessed both in terms of clinical condition and the use of National Health Service facilities.

Method

Twenty-seven patients were invited to participate in the study. All agreed to do so and this resulted in 15 patients in the experimental group and 12 in the control group.

All of the subjects were female patients in the age range 25–45 years, presenting with psychological problems in which stress may play a part. The age and sex restrictions were introduced to minimize extraneous variance in stress experience and this reflected the fact that patients in this group are among the most frequent consulters for psychological problems. Problem specification was based on the RCGP classification⁸ and further details of the criteria used are available from the authors on request. A two-group design was used with random allocation of subjects to each. Randomization aimed to control for any pre-treatment differences between the groups. Checks on the randomization procedure were made using information obtained from the patients' files — age, marital status, social class, occupational status, age on leaving full-time education, presenting complaint (anxiety versus 'other') and duration of episode, and number of prescriptions received for psychotropic drugs and number of consultations for psychological or non-psychological problems in the three-month period prior to recruitment. Non-parametric or parametric comparisons were used as appropriate.

Pre-treatment measurement using the 28-item general health questionnaire⁹ would have permitted a still more rigorous check of randomization but this was not used for two reasons. First, the congruence between the conditions of testing and intended use of the package was maximized where possible so as to facilitate subsequent generalization of the results.¹⁰ Administration of the general health questionnaire could have resulted in an increased degree of self-monitoring of symptoms by patients with the attendant risk of a pre-measurement treatment interaction. Secondly, the time taken to administer the questionnaire would have added at least five minutes to each consultation, a factor which would have influenced the willingness of the general practitioners to participate in the study.

Two general practitioners participated in the study and were

responsible for the selection and recruitment of patients and the distribution of the package. When a patient who met the study criteria consulted in the course of a normal surgery, the general practitioner dealt with the patient as he thought appropriate, but at the end of the consultation he asked if she would participate in the project. The project was described as a survey of people's health and it was emphasized that no additional treatment from the general practitioner would be involved.

While those agreeing to participate filled out a brief form with their demographic details, the general practitioner unobtrusively allocated them randomly to one of the two groups by reference to predetermined cards. The general practitioner then concluded the interview or administered the package. The package was administered without further reference to the project in order to avoid overt linking of the package and the project and instead it was emphasized that the package may be of help to the patient with her presenting problem.

Three months after the recruitment consultation, patients from both groups were interviewed by a clinical psychologist (B.K.). Clinical condition was assessed in terms of symptom level, using the general health questionnaire, and by self-rating of any change in the three-month period (greatly improved/improved/no change/worse/or much worse). Reference to medical notes provided additional data for the three-month periods before and after the recruitment consultation. Variables examined were the number of prescriptions received for psychotropic and non-psychotropic drugs and the number of consultations for psychological and for non-psychological problems.

Results

Of the 27 women who agreed to participate in the study, follow-up data was obtained on all except one member of the experimental group. She was of non-British birth and it was discovered at follow-up that she had difficulty reading English. As she did not read the package, she was excluded from the study. All the other members of the experimental group reported reading the package at least once.

The mean age of the sample was 36.7 years and the most common presenting complaint was anxiety (65%). The remaining patients suffered from a broad range of related complaints⁸ including tension headaches, transient situational disturbances/acute stress reactions/adjustment reaction, depression and physiological malfunctions arising from emotional factors. The mean duration of episodes was 3.2 years.

The randomization procedure was found to be effective. No differences were found for the variables tested, indicating that the two general practitioners selected patients from the same population and that, on these variables at least, the patients in both groups were matched.

At the three-month follow-up, the clinical state of patients

Table 1. Clinical condition at three-month follow-up based on the results of the general health questionnaire (GHQ) and patient self-rating.

	Mean score on GHQ (\pm SD)	No. (%) of patients rating themselves improved
Experimental group ($n = 14$)	5.0 (\pm 4.1)	9 (64)
Control group ($n = 12$)	9.6 (\pm 6.0)	5 (42)
Significance	$F = 4.6$, 1 df, $P < 0.05$	$\chi^2 = 4.62$, 3 df, NS

SD = standard deviation. df = degrees of freedom. NS = not significant.

in the experimental group was superior to those in the control group as judged by the general health questionnaire and patient self-rating (Table 1). The experimental group's total questionnaire score was approximately half that of the control group and a two-way analysis of variance (condition \times general practitioner) proved this difference to be significant. There was a parallel but non-significant trend in the patient's self-ratings of improvement over the three-month follow-up period.

Table 2 shows the differences in the numbers of prescriptions and consultations between the three-month periods before and after treatment. The experimental group showed a significant decrease in the number of consultations for psychological problems compared with the control group. There was no significant difference between the two groups in consulting for non-psychological problems. No significant differences were found between the groups in the number of prescriptions for psychotropic or non-psychotropic drugs. While both groups showed an increase in the number of prescriptions received for psychotropic drugs, the increase for the experimental group was considerably smaller than that showed by the control group.

A check was made in all analyses for the potential effects of using two different general practitioners to administer the package. There were no general practitioner \times group interactions in any analysis.

Discussion

Significant advantages were found for patients receiving the stress self-help package compared with controls in both their level of symptoms at three-month follow-up and their number of consultations with their general practitioner for psychological problems. As there was no significant change in their rate of

Table 2. Differences in the number of prescriptions and consultations with general practitioners between the three-month periods before and after treatment.^a

	Total change before and after treatment			
	No. of prescriptions		No. of consultations	
	Psychotropic drugs	Non-psychotropic drugs	Psychological problems	Non-psychological problems
Experimental group ($n = 14$)	+ 1	- 7	- 4	+ 2
Control group ($n = 12$)	+ 10	- 5	+ 13	- 4
Significance	NS	NS	$P < 0.05$	NS

^aPositive scores indicate that more consultations or prescriptions occurred in the post-treatment period than in the pre-treatment period. NS = not significant.

consulting for non-psychological problems, the possible masking or replacement of psychological consulting by non-psychological consulting does not appear to have occurred.

The trend in the prescribing of psychotropic drugs supports the above results. It is possible that the use of a longer follow-up period would have reflected more accurately any changes in prescribing as prescriptions can last for a number of months and patients may also have remained on medication while they tested any gains made. A longer follow-up period would also allow further assessment of the maintenance of advantages shown in consulting and symptom level.

These results are subject to certain qualifications. First, the absence of pre-treatment general health questionnaire scores means that it cannot be conclusively stated that the advantage shown by the experimental group at three month follow-up based on this measure is solely a result of receiving the package — there may have been pre-existing differences. However, given the success of the randomization procedure, as judged by comparisons on other variables, these differences should have been minimized. Secondly, a relatively small sample was studied and replication of the results with a larger sample would encourage greater confidence in their generalizability. Thirdly, it could be argued that the package's apparent effectiveness was partly a function of the extra time spent by the general practitioners with experimental patients while administering the package — approximately three minutes per patient.

Bearing in mind these qualifications, and given that no attempt was made to conduct a component analysis of the package itself or to use placebo conditions, it is only possible to speculate about the results achieved. The results of a related project to investigate this issue are currently under evaluation. It is tentatively hypothesized that the package benefits patients because it provides knowledge of stress which serves both to reassure patients and to provide them with additional strategies for coping with stress. The reduction in secondary anxiety concerning their symptoms and the increase in their ability to cope with stress might be expected to lead to the lower levels of symptoms and consulting rates found in this study.

The range of application of the package appears promising. The sample chosen, while restricted, is representative of a relatively large sub-group of those presenting with psychological problems in general practice, that is women aged 25–45 years with relatively severe and longstanding anxiety-related problems. It would be worth exploring the effects of variables such as problem type, severity and duration, together with patient characteristics such as educational attainment, on the usefulness of the package.

The package's scope is also wide in terms of its cost and ease of dissemination compared with a more traditional psychotherapeutic group or individual intervention. Its use here by general practitioners as part of their normal surgery fits well with the role of the general practitioner as a health educator.¹¹ However, other health professionals may also be able to make effective use of the package. Further research is required to examine the effectiveness of the package compared with other forms of intervention, the optimum amount of professional input required to administer the package, and who, if anyone, is best suited and willing to administer it.

In conclusion, it is not being suggested that self-help packages will ever be able to replace individual or group psychotherapy. However, the results presented here are worthy of further investigation as self-help packages may reduce the demand for such scarce resources by helping at least some individuals with anxiety-based problems. They may be viewed as one way of increasing the flexibility of health care provision for psychological problems, while maximizing the use to which scarce professional resources can be put.

References

1. McPherson I. Clinical psychology in primary health care: development or diversion. In: McPherson I, Sutton A (eds). *Reconstructing psychological practice*. London: Croom Helm, 1981.
2. Salmon P. The psychologist's contribution to primary care: a reappraisal. *J R Coll Gen Pract* 1984; **34**: 190-193.
3. Cormack MA, Sinnott A. Psychological alternatives to long-term benzodiazepine use. *J R Coll Gen Pract* 1983; **33**: 279-281.
4. Teare-Skinner P. Skills not pills: learning to cope with anxiety symptoms. *J R Coll Gen Pract* 1984; **34**: 258-260.
5. Anderson JE, Morrell DC, Avery AJ, Watkins CJ. Evaluation of a patient education manual. *Br Med J* 1980; **281**: 924-926.
6. Pike LA. Teaching parents about child health using a practice booklet. *J R Coll Gen Pract* 1980; **30**: 517-519.
7. Anonymous. Booklets for patients. *J R Coll Gen Pract* 1980; **30**: 514-515.
8. Royal College of General Practitioners. *Classification of diseases, problems and procedures 1984. Occasional paper 26*. London: RCGP, 1984.
9. Goldberg DP. *Manual of the general health questionnaire*. Windsor: NFER, 1978.
10. Glasgow RE, Rosen GM. Behavioural bibliotherapy: a review of self-help behaviour therapy manuals. *Psychol Bull* 1978; **85**: 1-23.
11. Fowler G. Health education in general practice. *Health Educ J* 1985; **44**: 44-45.

Acknowledgements

We wish to thank Dr M. Edward, Dr W. van Marle and the staff of the Lordwood Practice, Birmingham, for their active cooperation in implementing this project and the Stress Syndrome Foundation for making available the packages.

Address for correspondence

Brian Kiely, Department of Psychology, George Eliot Hospital, Nuneaton, Warwickshire CV10 7DJ.

COMPUTER APPRECIATION COURSES FOR GENERAL PRACTITIONERS AND PRACTICE MANAGERS/SENIOR PRACTICE STAFF

The RCGP Technology Centre, in conjunction with its Information Service, is pleased to offer a series of computer appreciation courses for general practitioners and their senior practice staff. These events are held at 14/15 Princes Gate, where overnight accommodation is available if required.

The course content and presentation assume that participants have either only superficial or no knowledge of computing. The principles, language and technology of computing are discussed in lay terms, with particular emphasis on the problems of, and potential solutions to, the introduction and management of the new technology in the practice.

The cost of the course for members and their staff is £160 (inclusive of Friday's residential accommodation) and for those not requiring overnight accommodation, the cost is £135. For non-members, the course fees are £180 inclusive of Friday's accommodation, and £155 exclusive. The fee includes all meals, refreshments and extensive course notes.

These courses are zero-rated under Section 63. Under paragraph 52.9(b) of the Statement of Fees and Allowances, practice staff attending the courses may be eligible for 70% reimbursement. Staff should confirm eligibility for reimbursement with their FPC.

The dates of forthcoming courses are as follows: 12–13 September, 17–18 October, 21–22 November 1986.

Application forms and further details are available from: The Information Service, The Royal College of General Practitioners, 14 Princes Gate, London SW7 1PU. Telephone: 01-581 3232.