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Stress management groups in general practice

A pilot randomised trial

BACKGROUND

Stress management delivered to groups of psychologically stressed patients effectively decreases their distress. This study investigated the effects of stress management delivered by Australian general practitioners.

METHOD

In a pilot randomised controlled trial, stress management was provided to a group of 11 patients whose outcomes were compared with another six patients acting as wait listed controls. Standard psychological questionnaires were administered before the course and 1 week and 2 months after.

At 1 week there were significant improvements in intervention group scores compared to controls in two out of 6 measures: the Positive and Negative Affect Scales. At 2 months there was only one significant improvement (brief disability days). There were no significant differences in the Kessler 10, self rated stress levels or brief disability score.

DISCUSSION

Group stress management delivered by GPs may help distressed patients and should be further investigated for effectiveness and cost effectiveness.

Stress management delivered to groups of patients

has been shown to be effective in managing depression and anxiety in many settings,1 including the hospital setting,^{2,3} general practice,⁴ and for primary care patients with psychosomatic complaints⁵ and somatisation disorders.6 The author could find no published reports of stress management being delivered to groups in Australian general practice for nonspecific stress related disorders. Community based stress management courses may not be accessible because of cost or stigma. Such interventions provided by general practitioners may save time and be more effective than usual care.

Mindfulness, meditation, and stress management techniques are taught in the Graduate Certificate in General Practice Psychiatry at Monash University (Victoria) and were the basis for the group therapy conducted in this trial.

Method

The stress management course consisted of 1 hour group sessions held once per week for 5 weeks. The benefits of reducing stress, practising meditation and employing mindfulness based cognitive stress management techniques were discussed. Patients were charged \$5-10 for each session.

During consultations the author identified patients likely to benefit from stress management. Patients who expressed interest were mailed information and given the opportunity to undertake the course with or without participating in the research. Excluded from the research were those aged less than 18 years, those unable to give informed consent, and those with cognitive impairment. Research volunteers were randomised to the intervention group or waitlisted control by having their names drawn from a hat at a ratio of 2:1 intervention to control to fill the intervention group. After the final questionnaire, control patients could then attend a subsequent course outside the study.

A questionnaire was administered at the first session and then at 1 week and 2 months after the course had finished. The questionnaire was previously validated and consisted of the Kessler 10 questionnaire (K10, which measures psychological distress), 7 the Positive and Negative Affect Scale (PANAS, which measures mood)8 and the Brief Disability Questionnaire (BDQ, which measures

level of disability).9 Participants provided demographic information and self rated their stress level on a Likert scale of 1-7. Results were analysed using the students t-test with significance set at <0.05.

Ethics approval was obtained from the Monash University Human Research Ethics Committee

Results

Invitations were sent to 63 patients (four were male) to attend the course. Forty-five patients responded (three males). Seventeen respondents (one male) agreed to the research. After randomisation, 11 were assigned to intervention (including the male) and six to wait listed control. The mean age of the control group and intervention groups was 52 years (range 43-74) and 49 (range 24-62) respectively. The average number of sessions attended by those in the intervention group was 4.4 (maximum 5).

At 1 week after the intervention, there was significant improvement in the intervention group scores for positive affect (increased scores) and negative affect (decreased scores) over the control group (p<0.05). There were no significant differences at 2 months (Table 1). Two months after the intervention, there was a significant decrease in the days out of role (BDQ days) in the intervention group compared to the control group (p<0.05). There was no significant difference at either time for the other parameters. There was a trend toward improvement for the K10 and stress levels after the intervention but this trend did not reach statistical significance.

After the trial, five participants from the control group attended a subsequent course.

Discussion

There are several weaknesses in this research. including the small number of participants, the lack of an a priori power calculation, loss to follow up of those who did not return questionnaires, and the larger intervention group. There may have been a bias introduced if those who declined to take part in the research, or who did not complete all the questionnaires, were more or less 'distressed' than the research participants.

That these patients had moderate levels of psychological distress is evident from the K10 score of 16-30 recorded by four participants in the control group and six in the intervention group, indicating a one in 4 chance (three times the population risk) of having a current anxiety or depressive disorder and a 1% chance (three times the population risk) of ever having attempted suicide. People who recorded scores of 30-50 (two participants in the control group and five in the intervention group) have a three in 4 chance (10 times the population risk) of meeting criteria for an anxiety or depressive disorder and a 6% chance (20 times the population risk) of having attempted suicide. 10

Participants showed statistically significant improvement in two measures - positive and negative affect scales - after completing the course. At 2 months, there was significant decrease in the days out of role (BDQ days) for the intervention group compared to the control group.

The preponderance of female participants in the groups could have many explanations. These data do not assist in determining which components of the intervention were effective the meditation, stress management techniques, or the group effect.

Further research involving greater numbers of participants would be more valid, and would allow subgroup analysis (eg. comparing those with high or low initial K10 scores), measurement of physical parameters and assessment of whether improvement persists.

Currently, GPs registered at level 2 under the Better Outcomes in Mental Health Care initiative can receive funding to provide stress management as a focused psychological strategy during a consultation, 11 but not to deliver such a therapy to a group such as that described here. If cost or stigma prevents

Table 1. Questionnaire scores in relation to group sessions				
		Questionnaire scores (significant <i>p</i> values only)		
		Before intervention	1 week after intervention	2 months after intervention
Parameter		(control n=6, intervention n=11)	(control n=5, intervention n=9)	(control n=5, intervention n=7)
Kessler 10	Control	25.3	25.8	23.0
	Intervention	27.5	18.1	16.8
Stress	Control	4.9	4.3	4.2
	Intervention	4.3	2.7	2.9
Positive affect	Control	16.0	11.8	15.0
	Intervention	16.6	22.8 (<0.05)	22.9
Negative affect	Control	14.5	20.6	17.8
	Intervention	18.7	10.9 (<0.05)	10.4
Brief disability score	Control	11.8	10.0	7.8
	Intervention	7.8	6.0	3.6
Brief disability days	Control	2.8	2.2	3.2
	Intervention	1.7	0.8	0.1 (0.001)

patients from accessing such courses through other providers, then there is a case for further research into the cost effectiveness of providing and funding group therapy courses through general practice.

Implications for general practice

- Psychological distress contributes to many general practice consultations for both physical and mental conditions.
- Stress management is effective in several settings.
- Stress management is approved under the Better Outcomes in Mental Health initiative.
- A short course delivering stress management techniques and mindfulness meditation to one group of patients with stress resulted in significant improvement in some measures of psychological distress over a control group.

Conflict of interest: none declared.

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