The clinical and cost-effectiveness of self-help treatments for anxiety and depressive disorders in primary care: a systematic review

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SUMMARY

Anxiety and depression are prevalent in primary care; however, current treatments differ in their availability, cost-effectiveness, and acceptability to patients. Self-help treatments (such as manual-based bibliotherapy) may be an appropriate intervention for some patients. The aim of this research was to determine the clinical and cost-effectiveness of self-help treatments for anxiety and depression in primary care by conducting a systematic review of randomised and non-randomised trials of self-help interventions for patients with anxiety and depression in primary care, from electronic database searches, correspondence with authors, and limited handsearching. Eight studies were identified, examining written interventions based mostly on behavioural principles. Although the majority of trials reported some significant advantages in outcome associated with self-help treatments, the number of included studies was limited and a number of methodological limitations were identified. There were no data concerning long-term clinical benefits or cost-effectiveness. In conclusion, self-help treatments may have the potential to improve the overall cost-effectiveness of mental health service provision. However, the available evidence is limited in quantity and quality and more rigorous trials are required to provide more reliable estimates of the clinical and cost-effectiveness of these treatments.

Keywords: *anxiety; depression; self-help treatment; clinical benefit; cost-effectiveness; systematic review.*

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Introduction

MENTAL health problems are common in primary care.[1] However, only a small proportion of individuals with these disorders are referred to specialist services. For those managed in primary care, treatment options include support from the general practitioner (GP) or practice nurse, medication or referral to an on-site counsellor or psychologist.[2] However, not all GPs possess the skills or enthusiasm for mental health work. Patients are often reluctant to take antidepressant medication[3] and the efficacy of antidepressants in relation to depressive disorders that do not meet specific diagnostic criteria (e.g. major depression) is unclear.[4] The prescription of anxiolytic medication has also been criticised, on the grounds of the likelihood of dependence,[5] lowered efficacy over time, and the problems associated with their illicit sale and use. Specialist mental health professionals are only moderately more effective than routine GP care in the management of mild to moderate disorders.[6,7]

Given these limitations, 'self-help' approaches may potentially widen access to effective treatment. Although self-help is currently used in some mental health services, paradoxically this is usually after the patient has made contact with specialist professionals, which limits their availability to people passing the primary care filter.[1] Greater availability of self-help treatment packages in primary care and community settings may have the potential to provide cost-effective, accessible, and appropriate treatment for a range of disorders.

Self-help in mental health is available in a number of formats. Psychological treatments, such as cognitive-behaviour therapy, require that therapeutic work is done by the patient between sessions with the professional[8] and standard psychological treatments are increasingly provided in written format ('bibliotherapy'). Computerised systems have been produced that provide greater flexibility in response to the individual patient[9,10] and allow information sharing with professionals around clinical progress and suicidal ideation. Using telephone and interactive voice response (IVR) means that access to a computer is not always required.[11]

Reviews and meta-analyses of self-help treatments such as bibliotherapy, in contexts other than primary care, have suggested that they are more effective than no care.[12-15] However, their cost-effectiveness has not received significant attention. An increasing number of studies in the primary care setting have been conducted and guidelines for the development of effective packages have been produced.[16]

The aim of this review was to determine the clinical and

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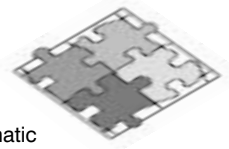

What do we know?

Acces to effective psychological therapies in primary care is problematic because of the small number of trained professionals and high demand for care. It has been suggested that self-help treatments based on proven psychological therapies may provide a method by which access can be improved.

What does this paper add?

This paper reviews the current evidence concerning self-help interventions in the treatment of anxiety and depression in primary care. The data is limited in both quantity and quality, but does provide some preliminary evidence that self-help treatments may be more effective that usual care in the short term. These treatments require further evaluation.

cost-effectiveness of self-help treatments in anxiety and depressive disorders in primary care.

Method

Inclusion criteria

Randomised controlled trials (RCTs) and controlled before-and-after studies[17] were eligible for the review: the latter were included because it was expected that the available RCT literature would be relatively small. There were no specific quality criteria for inclusion in the review. Instead, data were extracted from all studies on key methodological issues (Table 2). Disorders involving significant anxiety and depressive symptoms were included. Self-help has been used in adolescents[18] and no age criterion was used. Trials were included that used recruitment through the GP or screening of patients attending primary care.

Self-help was defined as (a) a therapeutic intervention administered through text, audiotape, videotape or computer text, or through group meetings or individual exercises such as 'therapeutic writing', and (b) designed to be conducted predominantly independently of professional contact.

Many self-help treatments involve initial professional contact for assessment and orientation and conventional psychotherapeutic treatments also require that patients conduct work independently of the therapist (e.g. homework in cognitive-behaviour therapy). A number of criteria were used to assist in judgements about criteria (b), including the identification of the treatments as 'self-help' by the authors, the intensity of self-help (e.g. the length of bibliotherapy materials supplied), and the ratio of therapist contact to self-administered therapy.

Search strategy

The search strategy involved searching Psycinfo (1967–1999), MEDLINE (1966–1999), EMBASE (1980–1999), CINAHL (1982–1999), the Cochrane Clinical Trials Register (Issue 2, 1999), the Counselling in Primary Care Counsel.lit database, and the National Research Register. Searches were conducted in August 1999. Keywords used were 'self help techniques', 'self instruction', 'self management', 'self administration', 'self care', 'self help', 'bibliotherapy', 'audiotape', 'videotape', 'manual' or 'minimal contact'. These were combined with the keywords 'primary care', 'family practice' or 'general practice'.

Authors of published and ongoing studies were contacted for further studies and information on the progress of ongoing work: 65% replied with information. All the reference lists of studies examined for the review were searched for relevant studies,[19] as were previous self-help reviews from outside the primary care context.[13-15,20,21] The *British Journal of General Practice* (1980–1999) and *Behavioural and Cognitive Psychotherapy* (1985–1999) were handsearched.

Because of lack of facilities for translation, the review was restricted to English language publications. Unpublished studies were eligible for the review.

Methods of the review

Eligibility judgements and data extraction were done independently by two reviewers. No formal measure of the reliability of data extraction was calculated, but disagreements were resolved by discussion or by contact with authors. Tables of excluded and ongoing studies are available from the authors.

Statistical methods

Effect sizes represent the magnitude of the difference in outcomes between the intervention and control groups in standardised terms (i.e. not based on the metric of the original outcome measure). They were calculated in the present review to allow comparison with previous reviews and other mental health interventions in primary care. The program Meta 5.3[22] was used to calculate the unbiased effect size *d,* which is based on the difference in the means of control and intervention group divided by their pooled standard deviation.[23]

Relevant statistics (e.g. standard deviations) were calculated or imputed when not presented in the original paper using data from other papers in the review (where available) or other primary care mental health studies. Effect sizes were only calculated for the most frequently used measures of anxiety and depression in each study (GHQ, HADS, SCL-90, STAI), and the primary outcome (when specified). When studies reported more than one of these measures, the effect sizes were averaged. As no study reported long-term outcomes (i.e. over six months), the effect sizes were based on the longest follow-up reported (between two and six months). A random effects model was used in calculating the overall effect size.

Results

Eight studies were identified for the review.[24-31] Twenty-three ongoing studies were identified that may be of relevance for later versions of the review, while 18 studies of self-help in primary care were excluded because they did not meet the design, intervention or patient population criteria (e.g. studies without control groups or studies targeting benzodiazepene withdrawal). The content of the interventions are listed in Table 1, while methodological details for each study are listed in Table 2.

Table 1, Interventions in the review.

Study	Study groups	Description of intervention in each group
Kupshik[24]	Written material plus telephone contact with nurse	Information about anxiety, instruction in relaxation, managing worrying thoughts, and lifestyle changes. Contact with the project worker was to enable skill acquisition rather than to counsel. Contact occurred over a six-week treatment period. Project worker was a nurse supervised by a clinical psychologist
	Written material plus bi-weeky meetings with nurse	As above, but with bi-weekly meetings in person with the nurse
	Written material plus weekly meetings with nurse	As above, but with weekly meetings in person with the nurse
Chalder[25]	Self-help booklet and nurse advice	Three-part booklet with information about fatigue, self-monitoring and diary-keeping, and cognitive-behavioural techniques for overcoming fatigue, plus 10 to15-minute discussion with nurse on the booklet and the patient's clinical assessment
	Routine primary care	No further details
Holdsworth[26]	Self-help booklet	Booklet includes a range of techniques for anxiety, depression, and related complaints within the three systems model (of thought, feeling, and behaviour); 42 pages, 7500 words, reading age: eight years
	Routine primary care	Routine primary care with access to the booklet at trial end (although not clear that patients knew they would have access)
White[27]	Self-help booklet	79-page booklet and double-sided relaxation tape ('deep' and 'rapid') divided into information and treatment sections. Flesch score of 73 (fairly easy), estimated required IQ = 87. Meeting with psychologist involved assessment and 30-minute discussion of 'Stresspac' and how to use it
	Advice only	Same assessment as Stresspac group, but 30-minute description of self-help replaced by specific verbal advice on ways of coping while on the waiting list, e.g. importance of exposure, relaxation, and challenging negative thoughts. No written or taped material
	No intervention	Assessment interview only, plus 30-minute discussion of their therapeutic intervention if appropriate
		All subjects had a 90-minute assessment interview and were offered conventional cognitive behavioural therapy treatment at the end of the study
Sorby[28]	Self-help booklet and explanation by GP	Booklet describes anxiety in terms of causes of anxiety, intervention, coping strategies and monitoring progress. GP registrar spent 10 minutes explaining contents
	Routine primary care	Routine primary care, but no changes in medication in first two weeks and consultations at 2, 4, and 8 weeks after recruitment
Donnan[29]	Self-help booklet and cassette	Booklet (27 pages, 4000 words), Flesch score of 71, four sections (description of anxiety; stopping its development; coping with anxiety; summary), including patient quotes and diagrams. Audiotape (55 minutes) repeated material from booklet and contained expanded relaxation instructions
	Routine primary care	No further details
Milne[30]	Self-help booklet	Advice about coping with anxiety, including causes and management (e.g. relaxation). Diagrams and self-test quizzes also included; 35 pages, with a Flesch score of 82 ('easy' level)
	Self-help leaflet	Summarised main points in booklet; 2 pages long, with a Flesch score of 69 ('standard level')
	Routine primary care	Routine primary care with promise of access to the most effective treatment at the end of the trial
Kiely[31]	Self-help leaflets	Six leaflets containing information on the causes, consequences and control of stress, plus 3 minutes extra GP time to administer self-help package
	Routine primary care	No further details

Scope of the included studies

The comparative arm was 'usual primary care' in seven studies, although White used an additional advice-only group[27] and Kupshik compared three levels of contact with a project worker and had no 'usual care' arm.[24] White assessed the use of self-help while all patients were waiting for conventional psychology services.[27] Compliance was discussed by four studies that reported the proportion of patients reading the booklets,[25,31] the overall use of exercises[26] or a self-report measure of compliance.[24]

Patients included those with anxiety[24,27-30] anxiety and depression,[26] stress,[31] and chronic fatigue.[25] Only White[27] and Sorby[28] confirmed DSM diagnosis.[27] GPs recruited patients in seven studies: Chalder used screening of attenders for fatigue.[25] Patients were predominantly female and middle-aged. Socioeconomic status was reported in only two studies and ethnicity in none. Sample sizes ranged from

Table 2. Characteristics of the included studies.

Study	Random-isation	Target population	Recruit-ment	Baseline sex and age	Baseline sample size	Measures	Follow-up period	Follow-up rate	Methodological issues
Kupshik[24]	Not reported	Patients with mild to moderate anxiety disorders	GP referrals	54% female; mean age = 38.8 years	102	Psychiatric symptoms Satisfaction	4 weeks pre-baseline, baseline, 6 weeks, and 12 weeks	78% at 6 weeks, 39% at 12 weeks	Power calculation: No Main outcome *a priori*: No Adjustment for baseline imbalance: No Included all randomised patients: Not clear Imputation of missing data: No Removal of false inclusions: No
Chalder[25]	Central	Patients with chronic fatigue aged 18–45 years	Screening	75% female; mean age = 35.5 years	150	Psychiatric symptoms Fatigue Physical functioning	Baseline, 12 weeks	83%	Power calculation: Yes Main outcome *a priori*: Yes Adjustment for baseline imbalance: Yes Included all randomised patients: Yes Imputation of missing data: Yes Removal of false inclusions: No
Holdsworth[26]	GP	Patients suffering from anxiety, depression or mixed anxiety and depression	GP referrals	Sex or age not clear	106	Psychiatric symptoms Coping Medication use Satisfaction	Baseline, 4 weeks, and 12 weeks	59%	Power calculation: No Main outcome *a priori*: No Adjustment for baseline imbalance: No Included all randomised patients: Yes Imputation of missing data: No Removal of false inclusions: No
White[27]	Not reported	Patients with anxiety disorders	GP referrals	58% female; mean age = 38.3 years	62	Psychiatric symptoms Locus of control Patient-rated outcome GP consultations Satisfaction	Baseline, 4 weeks, 8 weeks and 12 weeks	100%	Power calculation: No Main outcome a priori: No Adjustment for baseline imbalance: Yes Included all randomised patients: Yes Imputation of missing data: No Removal of false inclusions: No
Sorby[28]	GP	Patients with anxiety disorder	GP referrals	81% female; age not clear	64	Psychiatric symptoms	Baseline, 2 weeks, 4 weeks, and 8 weeks	83%	Power calculation: No Main outcome *a priori*: No Adjustment for baseline imbalance: No Included all randomised patients: Yes Imputation of missing data: No Removal of false inclusions: Yes
Donnan[29]	GP	Patients with chronic anxiety	GP referrals	74% female; median age = 42 years	103	Psychiatric symptoms	Baseline, 6 weeks, and 12 weeks	72% at 6 weeks, 60% at 12 weeks	Power calculation: Yes Main outcome *a priori*: No Adjustment for baseline imbalance: Yes Included all randomised patients: Yes Imputation of missing data: No Removal of false inclusions: Yes
Milne[30]	Not reported	Patients with clinical anxiety	GP referrals	72% female; mean age = 53 years	22	Anxiety Knowledge of anxiety management Coping Satisfaction	Baseline, 4weeks, and 24 weeks	82%	Power calculation: No Main outcome *a priori*: No Adjustment for baseline imbalance: No Included all randomised patients: Yes Imputation of missing data: No Removal of false inclusions: No
Kiely[31]	GP	Patients with stress-related problems	GP referrals	100% female; mean age = 36.7 years	27	Psychiatric symptoms Consultations Prescriptions	12 weeks	100%	Power calculation: No Main outcome *a priori*: No Adjustment for baseline imbalance: No Included all randomised patients: Yes Imputation of missing data: No Removal of false inclusions: Yes

22 to 150 (mean = 80).

Outcome measures included psychiatric symptoms, physical function, health service utilisation, coping, knowledge of disorder and satisfaction with treatment. All outcomes were self-report, apart from healthcare utilisation and one assessor-rated scale.[27] Length of follow-up ranged from two to 24 weeks. No data on costs were reported in any of the studies.

Quality of the included studies

The included studies were assessed on quality of randomisation and attrition.[32] Two other criteria used by the Cochrane collaboration (blinding of patients/professionals, and of outcome assessments) were not applicable, as it is not feasible to blind patients to an active intervention such as self-help and almost all studies used self-report only. The use of intention to treat analyses[33] was also assessed. Although a validated scale of RCT quality is available, it scores blinding and thus is inappropriate for the present review.[34] Therefore, no quality scores were created; the individual methodological details can be found in Table 2. Comments on the overall design and interpretation can be found in Table 3.

All studies were RCTs. In the Chalder[25] study randomisation was centralised. In the Sorby,[28] Donnan,[29] Kiely,[31] and Holdsworth[26] studies, GPs randomised patients and the methods used were vulnerable to bias because GPs may have been aware of the next allocation in the sequence. For example, one study used similar envelopes for the control and intervention packages, but the weights of the envelopes were different.[29] White,[27] Kupshik,[24] and Milne[30] provided insufficient information about randomisation. The Kiely[31] study raised ethical issues, since patients were randomised after being informed that they were to participate in a survey, not a trial.

Chalder[25] was the only study to define a main outcome *a priori* and only Chalder and Donnan[29] conducted a power analysis. In terms of criteria for intention to treat analyses, all studies included all randomised patients where follow-up data were available, but only Chalder[25] imputed missing data. Kiely,[31] Sorby,[28] and Donnan,[29] removed false inclusions post-randomisation. Data analysis almost always involved analysis of variance or *t*-tests. Only Chalder,[25] White,[27] and Donann[29] controlled for baseline imbalance. Follow-up of recruited patients ranged from 39% to 100%.

Overall, the methodological quality of the included studies was relatively low. Although no quantitative measure of quality was calculated, the Chalder,[25] Donnan,[29] and White[27] studies were the highest quality studies in terms of quality of randomisation, sample size, loss to follow-up, and analysis. The Milne[30] and Kiely[31] studies were particularly limited by the very small sample sizes.

Quantitative results

The results of the included studies are presented in Table 3. All studies reporting between-group comparisons reported significant advantages associated with self-help on at least one measure, although most studies reported multiple comparisons (43 in total over the eight studies).

Chalder,[25] White,[27] and Donnan[29] reported significantly superior outcomes in the intervention groups that were relatively consistent over multiple validated outcome measures. Kiely[31] and Kupshik[24] only reported a single validated mental health scale outcome and also found significant advantages associated with self-help. Holdsworth[26] and Sorby[28] reported some significant effects on anxiety measures, but not on other symptoms tested. Milne[30] did not report between-group comparisons.

Effect sizes based on means and standard deviations could be calculated for six of the eight studies. Donnan[29] only presented graphs and differences in mean change scores, while Kupshik[24] presented the proportion of patients undergoing clinically significant change. The effect sizes for four studies related to outcomes at three months while the others related to outcomes at two and six months. The calculated effect sizes for the various outcome measures ranged from -0.18 to 1.18. The mean effect size based on the random effects model was 0.41 (95% confidence interval [CI] = 0.09 to 0.72). The test for homogeneity was not significant, suggesting that the effect sizes were relatively homogenous.

There were insufficient studies for a detailed examination of the relationship between study quality and effect size. However, there did not seem to be any obvious relationship, with the two highest quality studies (Chalder and White) reporting average effect sizes of 0.34 and 1.00 respectively while the studies with limited sample sizes reported average effect sizes of 0.88[31] and -0.07 respectively.[30]

Discussion

The review has a number of limitations. Publication bias is often a problem for reviews of controlled trials. The review involved a number of different search methods, including correspondence with experts and authors of previous studies. It seems reasonable that unpublished studies would be more likely to be known to such informants but it cannot be absolutely certain that unpublished studies do not exist, given the high dependence on electronic database searching. The restriction to studies published in English is another limitation.

The review included studies recruiting in primary care only and excluded those from other settings, such as outpatients and community settings. Including such studies in a review allows consideration of whether results generalise across varied settings and populations.[35] A more restricted approach was taken in the present review for a number of reasons. The characteristics of patients in other settings may differ significantly, e.g. problem severity, motivation for treatment. Estimates of cost-effectiveness depend on the comparative treatments used, i.e. 'usual primary care' will involve different resources than 'usual outpatient care'. Finally, a number of reviews have already been published examining the general effectiveness of self-help treatments in a variety of settings and thus the decision was made to conduct a more focused review of maximum relevance to primary care.

Generally, previous reviews have suggested that the effect size of self-help treatments is greater than no treatment and similar to that of conventional psychotherapies.[14,20] A meta-analysis of bibliotherapy studies in unipolar depression (using the same analysis program as the present study) reported an average effect size of 0.82 in community volun-

Table 3. Results and interpretation of the studies.

Study	Results	Outcome	Duration	Effect size (*d*)	Comments
Kupshik[24]	Self-help significantly superior to control in terms of 'clinically significant change' on BPSP anxiety scale in maximum contact group compared with minimal contact at 6 weeks. Zung anxiety scale and 12-week data not reported.	Appropriate data not presented			Reporting of the process of intervention and outcome data was incomplete (published as a brief report) and might not permit replication. Without a 'treatment as usual' control the treatment effects cannot be ascribed with confidence to assisted bibliotherapy. The differential response to levels of assistance is reported on one measure only. Actual frequency and duration of telephone contact not reported. Differential results may have been owing to either quantity or mode of support or both.
Chalder[25]	Self-help significantly superior to control at 3 months in fatigue scores, proportion of fatigue cases, GHQ-12 score and MOS physical functioning. Significance of change in proportion of GHQ scores not reported.	GHQ-12	3 months	0.29	Participants were fatigue 'cases' recruited by screening, not referred by GPs. Consistent differences across most measures in favour of self-help group compared with controls. Overall positive results in favour of self-help over no specific treatment for patients who are moderately fatigued.
		Fatigue (primary outcome)	3 months	0.39	
Holdsworth[26]	Self-help significantly superior to control at 4 weeks in HADS anxiety only. No differences at either 4 or 12 weeks in GHQ-12, HADS depression, avoidance coping, behavioural coping, cognitive coping, emotion focus, and problem focus. Significance of changes in use of medication not reported .	HADS anxiety	12 weeks	0.36	Notwithstanding the paper's methodological problems (e.g. high loss to follow-up) the study conclusions were optimistic about self-help. However, only one measure out of eight showed an effect of self-help when added to treatment as usual. This effect was only seen in the short term with no effect in the medium term. Long-term differences not investigated. Self-help has a weak effect in this study.
		HADS depression	12 weeks	0.08	
		GHQ-12	12 weeks	0.18	
White[27]	Self-help significantly superior to control on SCL-90 symptom index and total score, HADS anxiety and depression, and patient rating of main problem. Changes in locus of control and GP consultations not significant. Changes in scores on Anxiety Interview Schedule not reported. Outcomes after conventional therapy were reported by the author but are not presented here.	SCL-90 symptom index	3 months	1.18	Data on outcome before conventional treatment shows superiority of self-help, although advice-only is also superior to no intervention in 2/7 measures as opposed to 5/7 measures for self-help versus control. The monthly measures posted to patients may have reminded them of their exercises and influenced outcome. Data suggested that self-help influenced patients' later use of conventional therapy. However, the sample size was small and the author assessed and treated all patients. Despite these problems, the study does provide some evidence for the efficacy of self-help with anxiety disorders.
		SCL-90 symptom total	3 months	0.87	
		HADS anxiety	3 months	0.99	
		HADS depression	3 months	0.94	
Sorby[28]	Self-help significantly superior to control on HADS anxiety, overall score on symptom rating test and anxiety subscale score, and analogue scale anxiety severity, frequency, predictability, and understandability. No significant differences in overall HADS score, and symptom rating test depression, inadequacy, and somatic scores.	HADS overall score	8 weeks	0.10	Both groups improved. The rate of recovery was greater in the self-help group for anxiety symptoms but not depression. Large short-term (two-week) differences in anxiety between the groups had disappeared by eight weeks. Self-help, therefore, conferred modest short-term benefits for anxiety compared with treatment as usual.
Donnan[29]	Self-help significantly superior to control at 3 months on Leeds depression and anxiety scales and GHQ-30. Significant difference in mean change at 3 months with Leeds depression scale. No significant difference in anxiety and GHQ-30 change scores.	Appropriate data not presented			The study suffered significant attrition and lack of intention to treat analysis. When change scores were analysed at 3 months, only depression outcomes were significantly superior in the intervention group. Self-help confers a modest benefit for anxiety and depression, with the advantages for depression possibly being more persistent.
Milne[30]	No between-group comparisons reported.	STAI (state)	6 months	-0.18	The small sample size in this study restricts its ability to inform. Only the intermediate measure of knowledge may have improved differentially (although only a within-group test was reported). Sample size may have been too small to demonstrate significant differences between groups on psychological outcome measures.
		STAI (trait)	6 months	0.04	
Kiely[31]	Self-help significantly superior to control in terms of GHQ scores but not patient-rated improvement. Self-help significantly superior to control in terms of change in number of psychological consultations but not psychotropic or non-psychotropic prescriptions or somatic consultations.	GHQ-28	3 months	0.88	The small sample size makes interpretation difficult. No pre-treatment measures of health, hence the superiority of experimental treatment over control may have been owing to baseline imbalance and/or the passage of time. Utilisation measures all showed improvement in favour of self-help but only one measure was significant. Non-blindness of GPs may have influenced service utilisation measures.

BPSP = buffers, pressures and symptoms profile; GHQ = general health questionnaire; MOS = Medical Outcomes Survey; HADS = Hospital Anxiety and Depression Scale; SCL-90 = Symptom Checklist 90.

teers.[20] Other meta-analyses[13,15] have also tended to use community-recruited volunteers (although patients from other settings have been included). One reported an effect size of 0.91 for anxiety and 0.57 for depression[13] and another 1.11 for 'fear reduction' and 0.74 for depression.[15]

The effect size estimates in the current review must be seen as preliminary. Only one study defined a primary outcome *a priori* and data had to be imputed when it was not available in the published article. The mean effect size in the present study was lower than those reported by the reviews discussed above, which may relate to differences in the severity of patients or their motivation for treatment or could relate to the fact that control patients in primary care trials may be more likely to be receiving medication or other interventions. However, a meta-analysis of four trials of non-directive counselling in primary care reported an overall effect size of 0.30,[7] which suggests that self-help treatments in primary care may be of similar effectiveness to traditional therapist-delivered treatments, which would agree with previous comparisons of the two forms of treatments. However, differences in patient populations and suchlike make comparisons between these effect sizes problematic, and direct comparisons of self-help and therapist-delivered treatments are the optimum method of evaluating their comparative cost-effectiveness.

Overall, the authors' reported significance of findings and the effect size calculations would suggest that self-help treatments are modestly clinically effective overall, although the size of the effect varies and the impact may be more likely on some outcomes (e.g. self-reported anxiety) than others (depression, GP consultations). However, the studies in the review have a large number of methodological drawbacks, including small sample sizes and high levels of attrition; inadequate description of patients or treatments; inadequate reporting or conduct of randomisation; and lack of specificity in analysis. Confidence in the internal validity of some of the findings is thus limited, and the positive results can only be considered suggestive.

In terms of external validity, GP referral of patients makes studies vulnerable to selective recruitment. None of the studies estimated the proportion of eligible patients who did not participate, and thus it is not clear whether included patients are representative of eligible patients generally. There is little published evidence concerning the degree to which patients find self-help packages acceptable, compared with conventional therapy treatments and medication.

Six trials involved anxiety and depression. Although the natural history of these disorders differs, psychotherapy trials in primary care often include patients based on GP identification of mental health problems.[36,37] Since symptoms of anxiety and depression are highly correlated in community populations,[1] distinguishing between these disorders might be viewed as arbitrary. Two studies involved 'stress' and 'chronic fatigue' respectively, but were included because both problems would be expected to be associated with anxiety and depressive symptoms,[38,39] both used the General Health Questionnaire as an outcome measure, and the intervention in the fatigue study explicitly involved cognitive techniques of relevance to depression (e.g. identifying negative thoughts).

The Cochrane collaboration suggests that reviews can be used to categorise interventions into one of six categories, based on whether the evidence is sufficient to have immediate implications for practice (such as interventions that improve outcomes, or those that should be abandoned in light of the available evidence), or whether the evidence is insufficient to change practice but should influence priorities for research. The present review would suggest that self-help materials in primary care are 'forms of care that appear promising, but require further evaluation'.[32]

Given that economy must be one of the factors that led to interest in self-help treatments, it is disappointing that no economic analyses are available. Additionally, only three studies reported post hoc analyses of non-treatment factors associated with outcome.[24,29,31] Future studies might benefit from the use of theoretically relevant psychological measures (such as preferences, expectancy, and self-efficacy) as mediators of outcome.

All the included studies involved written material. This has obvious advantages in terms of economy, ease of use, and familiarity. Future evaluations may usefully examine other modes of administration (such as telephone or computer). Although neither of these methods has the general utility of written materials, they do offer the possibility of more interactive presentation and offer access to those with low levels of reading skill. Another issue concerns the development of self-help in languages other than English.

Only one study examined the degree to which professional involvement facilitates self-help[24] and there was no economic analysis to determine whether the additional clinical gains were cost-effective. It is also important to determine the degree to which any guided intervention benefits from specific mental health expertise or can be conducted by trained primary care professionals or paraprofessional therapists.[40] A trial examining the use of self-help by practice nurses is in progress.

There was little detail concerning how patients use these materials (e.g. when, how often). Qualitative research may be useful in this regard.[41] It would also be interesting to further examine the association between the extent of use of self-help packages and eventual outcome that was reported in one study:[24] a strong dose-response relationship might strengthen the case for professional input to encourage use of the package, in the same way that antidepressant treat-

Key points

- Psychological approaches to mental health care are popular with patients and increasingly used in primary care.
- Some psychological treatments can be provided in a self-help format which has the potential to reduce the cost of treatment and increase access to specialist help.
- There is preliminary evidence that these treatments are more clinically effective than GP care.
- However, self-help trials are limited in quantity and quality, and thus the implications of the review for practice are limited.
- Further evidence is needed concerning clinical and cost-effectiveness, the role of professionals as facilitators, and the mechanisms of change, to evaluate properly the place of self-help treatments in mental health care in primary care.

ment may require assistance beyond the initial prescription.[42]

In conclusion, the review provides some preliminary evidence that self-help packages may offer some clinical advantages over routine primary care. However, the studies on which that preliminary conclusion is based are limited in quantity and relatively low in quality overall. Nevertheless, there are a significant number of ongoing studies in this area which should provide much more detail and specificity for future versions of the review. Future research priorities include overcoming the methodological shortcomings of the published work, conducting economic analyses, and the examination of the key aspects of self-help interventions that are important determinants of outcome, such as the extent of professional involvement and patient psychological characteristics.

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