Coping with depression: a pilot study to assess the efficacy of a self-help audio cassette

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SUMMARY

Background: *The self-help audio cassette 'Coping with Depression' was produced and widely distributed as part of the national Defeat Depression Campaign. A central aim was to improve public understanding and encourage the use of cognitive-behavioural techniques.*

Aim: *To formally assess the ability of the audio cassette to change attitudes to depression in primary care and the degree to which patients are motivated to practice its recommended coping strategies.*

Design of study: *Comparison of Likert ratings of agreement completed by patients, before and after listening to the audio cassette at home.*

Setting: *General practitioners (GPs) in central Leeds chosen randomly from the 1998 West Yorkshire Practice Directory.*

Method: *Fifty out of 71 patients aged over 16 diagnosed as depressed by their GP completed the hospital anxiety and depression (HAD) Scale and Likert ratings of agreement with key messages on the audio cassette. General practitioners provided feedback on the utility of the audio cassette in routine practice.*

Results: *A clinically significant improvement in overall attitudes and knowledge of 13% (95% confidence interval = 7–20%,* P = *0.001) was seen. Negative attitudes decreased most among those not taking antidepressants (*P = *0.007). Hearing a description of depressive symptoms and practical advice on coping were rated as the main benefits. Thirty (60%) patients stated that they had already begun to try out the cognitive-behavioural suggestions within the first week.*

Conclusions: *Larger randomised controlled trials are needed to confirm the efficacy of self-help audio cassettes for depression. This tape may be most helpful to patients with negative attitudes towards treatment, especially those who initially decline antidepressant medication.*

Keywords: depression; self-help; cognitive-behavioural therapy.

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Introduction

THE evaluation of clinically effective treatments for those with common mental health problems in primary care remains a government priority.[1,2] In the United Kingdom (UK), 90% of patients with depressive disorder are managed in general practice alone[3] and account for around 10% of all consultations for new illness episodes.[4] The national Defeat Depression Campaign (1992–1997) was a joint educational initiative supported by the Royal College of General Practitioners and the Royal College of Psychiatrists. The central aim[5] was to improve public and professional knowledge regarding detection and treatment of depressive disorder.

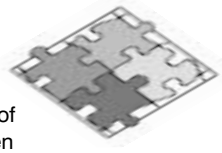
The Campaign emphasised self-help strategies using cognitive-behavioural techniques of proven efficacy in the management of depression[6] and produced 'Coping with Depression'[7] — an audio cassette designed for patient use. The tape employs an interview and commentary style, including the views and advice of patients and professionals. Side 1 of the audio cassette presents basic information about the nature of depression and repeatedly emphasises that it is common, recognisable, and treatable. Side 2 gives practical information on self-help approaches, including exercise and cognitive-behavioural methods, such as activity scheduling, diary keeping, and the challenging of automatic negative thoughts. It also provides advice for relatives and details of self-help groups that are available.

The audio cassette has been widely distributed and used in some areas of the UK (Smart and Davis, personal communication year) and remains commercially available. However, it has never been formally evaluated. A MedLine literature search (1979–1999) reveals few studies that investigate the use of self-help materials (including leaflets[8] and video cassettes[9]) in the management of depression in primary care.[10] Whether an audio cassette can actually influence negative attitudes among patients regarding the treatment of depressive disorder[11] remains uncertain.

Aims

This study examined whether use of the 'Coping with Depression' audio cassette in primary care can change attitudes and improve knowledge about the nature of depression and be practicable and acceptable to patients and their general practitioners (GPs). It also aimed to define which particular aspects of the audio cassette patients find most useful, and the extent to which they are motivated to try out cognitive-behavioural techniques in the absence of a therapist.

HOW THIS FITS IN



What do we know?
Cognitive behavioural techniques are of proven efficiency in the management of depression. Self-help materials have been promoted as a cost effective method of delivering mental health care within general practice.

What does this paper add?
The 'coping with depression' audiocassette is useful and acceptable to patients in primary care. The majority were motivated to practice the audiocassette's coping strategies at home. Attitudes and knowledge about depression improved significantly, especially in those not taking antidepressant medication.

Method

Ethical approval for the pilot study was obtained from the local research ethics committee. An initial letter of invitation was sent to 53 GPs in central Leeds chosen randomly from the 1998 West Yorkshire Practice Directory. Sixteen (30%) agreed to participate, comprising eight male and eight female GPs from 11 surgeries (median partnership size = 5). Each doctor was given three copies of the cassette and asked to recruit up to six depressed patients between 1 July 1998 and 30 October 1998.

This was a pragmatic study of depression as typically seen in primary care. Patients aged 16 years and over who had been diagnosed as having a depressive disorder by their GP in the surgery were included. Cases with co-existing anxiety, physical or social problems, or depression as part of manic depressive (bipolar) disorder could be recruited. The audio cassette did not have to be given at the onset of depression or first consultation and patients with recurrent or chronic depression or those under hospital supervision could also participate.

Exclusion criteria were defined as: inability or refusal to give written consent, deafness, no access to facilities for playing the audio cassette, a diagnosis of learning disability or dementia, and the presence of psychotic symptoms.

General practitioners kept a written record of all those invited to listen to the audio cassette. Participating patients completed the Hospital Anxiety and Depression (HAD) scale[12] in the surgery, together with a questionnaire rating their agreement with key attitudes and knowledge regarding depression that were to be emphasised on the tape. This questionnaire was based on cassette transcripts and worded where possible to incorporate statements previously used by the Defeat Depression Campaign in public opinion polls.[13] Five-point Likert scales were used (scored for 'strongly agree' = 1, 'agree' = 2, 'unsure' = 3, 'disagree' = 4, and 'strongly disagree' = 5). Baseline questionnaires were posted by the GP to the study author.

Patients were given a copy of the audio cassette, with written instructions to listen to it as often as they wished over the next seven days, before returning it to their GP for use by other patients. A second questionnaire enclosed with the audio cassette was completed by the patient at home after listening to the audio cassette and posted back to the author's hospital base in the stamped addressed envelope provided. It invited comments on the general usefulness, strengths, and weaknesses of the audio cassette and asked the same questions regarding attitudes and knowledge as the first questionnaire to enable a comparison to be made. Patients were also asked whether they intended to try out any of the self-help strategies emphasised on the audio cassette. A reminder questionnaire was sent out to those who had not returned the second form three weeks after the date of completion of the first questionnaire.

All other aspects of care appropriate to the clinical management (such as referral to other agencies and the use of antidepressant medication) occurred as usual, independently of the use of the audio cassette. At the end of the study, GPs were interviewed regarding their opinions on the utility and feasibility of incorporating the audio cassette into their daily clinical practice.

Data analysis was performed using SPSS for Windows 6.1. Changes in attitudes to depression were analysed using the Wilcoxon signed ranks test applied to paired median 'before' and 'after' ordinal Likert scale scores. Attitude scores were also coded as a dichotomous variable (whether the patient did or did not agree/strongly agree with a given statement). The difference in proportions with 95% confidence limits was then calculated using standard formulae.[14]

Results

All 71 patients approached by their GP were willing to participate in the study, a median of four (range = 1–7) per doctor. Of these 71 who completed their baseline questionnaires and received a copy of the depression tape, 50 subsequently returned the second questionnaire (after a median period of eight days), giving a response rate of 70%. Table 1 shows that although non-responders were younger than responders, they did not differ significantly for other baseline characteristics.

Sixteen patients (32%) listened to the audio cassette once or twice, 20 (40%) three or four times, and 13 (26%) between five and 10 times in total. A friend or relative also listened in 20 (40%) cases. Men played the audio cassette significantly more often than women (median = five versus three times, Mann–Whitney U = 141.5, $P = 0.02$). While in possession of the tape, only 13 (26%) patients stated that they had sought or received information about depression from other sources (friend or relative in 11 cases; book, magazine or leaflet in 10 cases; television or radio in three cases). Eleven (85%) stated that these were less useful than the audio cassette.

Changes in attitudes and knowledge

Table 2 shows that listening to the tape had a positive effect upon previous attitudes towards depression. An overall negative attitude score (NAS, maximum = 40) was calculated by summing the individual Likert ratings of agreement with statements 1 to 8. For statements 2 and 8, Likert scores were reversed, and per cent disagreement used when calculating totals. The fall in the total NAS score from 19 to 17 after listening to the audio cassette represents a medium clinical effect size[15] of 0.46. A lower NAS after playing the audio cassette correlated significantly with a higher overall rating of its

Table 1. Characteristics of questionnaire responders and non-responders.

Variable	Responders (*n* = 50)	Non-responders (*n* = 21)	*P*-value
Mean age (years)	43.4	37.1	0.01[a]
Number (%) males	14 (28)	6 (29)	0.96
Number (%) with professionals other than GP involved	18 (37)	5 (24)	0.29
Number (%) taking antidepressant drugs	40 (80)	16 (76)	0.60
Median length of depression (IQR)	8 months (3–16)	5.5 months (2–15)	0.24[b]
Median HAD depression score (IQR)	10 (8.5–14)	14 (9.5–17)	0.13[b]
Median HAD anxiety score (IQR)	13 (11–18)	16 (11–17)	0.55[b]

IQR = interquartile range. *P*-values are for chi-squared tests except: [a]Student's *t*-test and [b]Mann–Whitney tests.

Table 2. Changes in attitudes as a result of listening to the audio cassette.

Statement	Number (%) agreeing		Difference in proportions (95% CI)	Median attitude scores (IQR)		Wilcoxon test (*p* value)
	Before	After		Before	After	
1. Depression is a very common problem	35 (70)	43 (86)	16 (-2.4 – 34.4)	2 (2–3)	2 (2–2)	0.08
2. Depression is a sign of weakness	11 (22)	4 (8)	-14 (-49.6 – 21.6)	3 (3–4)	4 (3–4)	0.03
3. Depression is a medical condition like a physical illness (such as diabetes or asthma)	33 (66)	38 (76)	10 (-11.1 – 2.1)	2 (2–3)	2 (1.5–2)	0.55
4. There are things that I can do to help myself cope with depression	38 (76)	41 (82)	10 (-8.5 – 28.5)	2 (2–2)	2 (2–2)	0.16
5. There are effective treatments available for depression	33 (66)	39 (78)	12 (-8.7 – 32.7)	2 (2–3)	2 (2–2)	0.15
6. Talking treatments such as counselling are effective for depression	26 (52)	31 (62)	10 (-15.7 – 35.7)	2 (2–3)	2 (2–3)	0.06
7. Tablets known as antidepressants are an effective treatment for depression	25 (50)	38 (76)	26 (2.2 – 49.8)	2.5 (2–3)	2 (2–2.25)	0.003
8. Antidepressant drugs are addictive (you can get hooked on them)	7 (14)	1 (2)	-12 (-49.6 – 25.6)	3 (3–4)	4 (3–4)	0.001
Total	272(68)	325(81)	13 (7.0 – 20.0)	19 (16.5–23)	17 (14–19.75)	0.001

helpfulness (Spearman's $\rho = -0.29$, $P = 0.04$).

Compared with those taking antidepressant medication, the 10 (20%) patients who were not on antidepressant drugs showed a significantly greater improvement in total NAS after listening to the tape (median NAS decreasing from 23 [interquartile range = 22–23.5] to 17 [IQR = 17–19.75], versus 18 [IQR = 16–21] to 17 [IQR = 14–19] for those on antidepressants, Mann–Whitney U = 59, $P = 0.007$). The improvement in negative attitudes was most apparent for opinions regarding the role of antidepressants among those not taking medication. For example, 13 patients changed their mind after listening to the audio cassette to 'agree' with the statement 'tablets known as antidepressants are an effective treatment for depression'. Of these, five out of 40 (12.5%) were and eight out of 10 (80%) were not taking antidepressant drugs (difference in proportions = 67.5%, 95% CI = 40.7–94.3).

Motivation regarding self-help suggestions on the audio cassette

At the time of returning their second questionnaire, 30 (60%) patients had begun to try out one or more of the coping techniques described on side 2 of the audio cassette. Responders stated that they were already doing, or intended to start doing within the next few days, a median of four out of the seven self-help strategies. Table 3 shows that the most popular suggestions were 'plan to do more of the things I used to enjoy' (46 out of 50 cases [92%]) and 'try to look at my thoughts in a different way' (44 [88%]).

Usefulness of the audio cassette

Thirty-four patients (68%) rated the tape as quite or very helpful to them in coping with their depression, 13 (26%) were unsure, and three (6%) described the tape as not at all helpful. According to patients, the most useful information on the tape was recognition of their symptoms as being depression, advice on self-help coping techniques, and simply knowing that others also suffered from depression (Table 4).

No subgroups of patients particularly likely to benefit from the audio cassette were identified. Neither changes in the total NAS nor motivation to carry out the self-help suggestions showed any significant relationship with the patient's age, sex, HAD scale scores, length of the depression, or whether patients had used other sources of information about depression while in possession of the audio cassette.

Table 3. Motivation to carry out self-help suggestions described on the audio cassette (n = 50).

Coping technique	Already began to do this (%)	Intend to do this in next few days (%)	Not likely to try this (%)
Plan to do more of the things I used to enjoy	30	62	8
Try to look at my thoughts in a different way (such as the evidence for and against the thought being true)	30	58	10
Start doing more regular exercise each week	36	46	18
Keep a diary of situations, feelings, and thoughts	12	40	48
Keep a diary of how I spend my time	6	34	58
Contact one of the addresses listed on the cassette leaflet[a]	4	22	70
Find out about joining a local self-help group for depression	4	20	74

[a]Depressives Associated, Federation of Depressives Anonymous, British Association of Counselling or Association for Post-Natal Illness.

Table 4. Responses to the question: What did you like or find the most useful about the audio cassette?[6]

Aspect of audio cassette	Patient quotes	Number (%) replies
1. Hearing a clear description of the symptoms of depression	'It describes exactly how I'm feeling' 'Makes me feel less of a freak' 'The difference between feeling depressed and clinical depression' 'Confirms I am ill, not just being pathetic'	17 (34)
2. Practical advice on coping strategies	'The cognitive therapy suggestions' 'Medical advice on diet and exercise' 'Other sources of help, e.g. depression groups'	10 (20)
3. Knowing that I am not alone	'Just knowing you are not the only one' 'The similarity between other peoples' problems and my own was quite haunting' 'A relief to recognise myself'	9 (18)
4. Identifying with sufferers speaking on tape	'I can relate to one woman who is a real fighter very much on this tape' 'Listening to fellow depression sufferers describe their experiences'	5 (10)
5. Being given the tape showed I was being taken seriously	'It is good to know that this debilitating illness is taken so seriously' 'The tape explained that I have been brave rather than weak to seek help' 'Now I feel it was silly of me to think I was wasting my doctor's time'	4 (8)
6. Other	'Knowing that depression is treatable' 'There is light at the end of the tunnel' 'Knowing antidepressants are not addictive' 'I can re-play the tape as many times as I need' 'Easier to play the tape to family and friends than to try to explain it myself'	5 (10)
Total		50 (100)

Problems and difficulties

When asked to describe which aspects of the audio cassette they liked least, or had difficulty with, 30 (60%) patients made specific comments. Most striking was the variety of contrasting opinions. Although generally described as 'very convincing' and 'easy to listen to — nothing clinical about it', some resented 'doctors talking like doctors' and felt that they were 'reading from a script'. Being able to identify with key sufferers speaking on the audio cassette was regarded as a strength by many, while others 'could not relate to them' and found it 'hard to listen to people discussing their feelings'. Motivation to listen to the audio cassette in the first place was a problem for two patients. The self-help advice was well received overall, but some were disappointed that trying out these strategies had brought them only temporary relief. One patient disliked the idea of keeping a diary because 'I wouldn't like it to be read by anyone else'. Two responders commented that hearing the cognitive-behavioural suggestions had made them feel guilty or angry ('at the moment I don't feel like doing these things').

General practitioners gave positive feedback regarding the usefulness of the tape as a welcome addition to their routine management of depression. Some felt that they may have been biased in their recruitment of depressed patients, being more likely to hand out the audio cassette to 'borderline' or 'difficult' cases, such as those less willing to take antidepressant medication. Doctors stated that their main practical problem was persuading patients to return the audio cassette to the surgery for re-use.

Discussion

This pilot study suggests that the 'Coping with Depression' audio cassette may be useful and acceptable to patients in primary care. The majority of responders stated that they tried out several of the cognitive-behavioural strategies described, although their actual participation with these was not directly confirmed. The 13% overall change in patient attitudes to depression noted after playing the audio cassette compares favourably with shifts in views among the general public of between 5% and 10% occurring during the five-year Defeat Depression Campaign.[13]

The limitations of this pilot study should be emphasised. It is not a randomised trial: a control population might also have improved during the study period. The main outcomes

are to do with changes in attitudes and knowledge rather than symptoms and disability. Furthermore, the 30% who did not return the second questionnaire could have had particularly negative attitudes to the audio cassette. Feedback from GPs suggested that patients given the audio cassette may have been more rather than less resistant to normal therapeutic interventions. No statistically significant differences were found for several of the individual attitude scores in Table 2. Power calculations using a one-group chi-square test (0.05 two-sided significance level, 80% power) indicate that a sample size of 100 would be required to detect a 10% change in agreement with any one statement. Finally, changes in attitudes that did occur could be owing to factors other than the audio cassette. However, three-quarters of participants reported using the tape as their only information source and involvement of professionals other than the GP in a patient's care was unrelated to changes in the total NAS.

From the study outset, GPs or their receptionists, kept a record of patients given a copy of the audio cassette. They were encouraged to telephone those failing to return the tape within 14 days of the initial consultation. Despite these measures, some patients kept their tapes for several weeks or indefinitely. Information leaflets might therefore appear to represent a more pragmatic option, on grounds of cost and disposability. However, a recent randomised controlled trial in primary care found that leaflets had no significant effect on adherence to drug treatments in depression.[9]

It is interesting that the most significant shift in attitudes after listening to the audio cassette was towards antidepressant medication, as only a small proportion of the total listening time was specifically devoted to this. Initially, the total NAS was significantly higher for those patients not on antidepressant medication, but fell after playing the audio cassette to the same level as those taking antidepressants. Surveys have consistently shown that the public believe psychotropic drugs will be less likely to help than psychotherapy in managing depression.[11,16] Hence this tape may be most useful as a primer for patients who initially decline medication, to enable them to reconsider the option of taking antidepressant drugs.

User groups firmly believe that patients should be involved in developing and testing self-help materials first,[17] to ensure that the information provided is acceptable, relevant, useful, and attractively presented.[18] This study suggests a need for the commissioning of randomised controlled trials of self-help resources in primary care.[19]

References

1. Secretary of State for Health. *Saving lives: our healthier nation.* London: HMSO, 1998.
2. NHS Executive. *The new NHS: modern, dependable: a national framework for assessing performance.* London: DoH, 1998.
3. Paykel ES, Priest RG. Recognition and management of depression in general practice: consensus statement. *BMJ* 1992; **305:** 1198-1202.
4. Goldberg DP, Bridges K. Invited review: somatic presentations of psychiatric illness in the primary care setting. *J Psychosom Res* 1988; **32:** 137-144.
5. Management Committee & Scientific Committee of the 'Defeat Depression' Campaign. *Defeat Depression.* London: DoH, 1993.
6. Enright SJ. Cognitive-behaviour therapy — clinical applications. *BMJ* 1997; **314:** 1811-1816.
7. Lloyd W. *Coping with depression* (single audio cassette version). Defeat Depression Campaign 1993. Wirral: Talking Life Audio Productions Limited, 1993.
8. Peveler R, George C, Kinmonth A-L, *et al*. Effect of antidepressant drug counselling and information leaflets on adherence to drug treatment in primary care: randomised controlled trial. *BMJ* 1999; **319:** 612-615.
9. Robinson P, Katon W, Von Korff M, *et al*. The education of depressed primary care patients: what do patients think of interactive booklets and a video? *J Fam Pract* 1997; **44:** 562-571.
10. Gould RA, Clum GA. A meta-analysis of self-help treatment approaches. *Clin Psychol Rev* 1993; **13:** 169-186.
11. Priest RG, Vize C, Roberts A, *et al*. Lay peoples' attitudes to the treatment of depression: results of opinion poll for Defeat Depression Campaign just before its launch. *BMJ* 1996; **313:** 858-859.
12. Zigmond AS, Snaith RP. Hospital anxiety and depression scale. *Acta Psychiatr Scand* 1983; **67:** 361-370.
13. Paykel ES, Hart D, Priest RG. Changes in public attitudes to depression during the Defeat Depression Campaign. *Br J Psychiatry* 1998; **173:** 519-522.
14. Gardner M. *Confidence interval analysis*. London: BMJ Publications, 1991.
15. Hevey D, McGee HM. The effect size statistic: useful in health outcomes research? *J Health Psychol* 1998; **3(2):** 163-170.
16. Angermeyer MC, Matschinger H. Public attitude towards psychiatric treatment. *Acta Psychiatr Scand* 1996; **94:** 326-336.
17. Coulter A, Entwistle V, Gilbert D. Sharing decisions with patients: is the information good enough? *BMJ* 1999; **318:** 318-322.
18. Coulter A. Evidence-based patient information. *BMJ* 1999; **317:** 225-226.
19. NHS Executive. *A first class service: quality in the new NHS.* London: DoH, 1998.

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