

# The use of cognitive behavioural therapy techniques for anxiety and depression in hospice patients: a feasibility study

T Anderson Belfast City Hospital, Belfast, M Watson Northern Ireland Hospice Care, Belfast; University of Ulster, Ulster; Honorary Consultant, The Princess Alice Hospice, Esher and R Davidson Belfast City Hospital, Belfast

Anxiety and depression are common in palliative care patients. Cognitive behavioural therapy (CBT) has been recommended as one possible treatment, and it has been suggested that non-mental health professionals may be able to treat milder disorders with CBT. The aim of this study was to assess whether the use of CBT techniques in hospice patients is an acceptable intervention, and whether a palliative care professional with short CBT training can usefully apply such techniques. A feasibility study of a brief CBT intervention following training was conducted. Qualitative analysis was carried out on patient feedback from semi-structured interviews. Hospital Anxiety and Depression Scale scores pre-and post-intervention were analysed statistically. Eleven patients completed a short course using CBT techniques. The intervention was acceptable for 10 patients. One patient found it unacceptable due to advanced disease, lethargy and severe depression. Anxiety or depression symptoms were helped in eight patients. This study showed that a palliative care professional with short training in CBT was usefully able to apply CBT techniques to hospice patients with mild-to-moderate anxiety or depression. *Palliative Medicine* (2008); 22: 814–821

**Key words:** anxiety; behavioural; cognitive; depression; hospice; palliative

## Introduction

Anxiety and depression are common in palliative care patients and can cause significant distress to patients and carers.<sup>1,2</sup> There is limited expertise to recognise and treat these conditions within oncology and palliative care settings.<sup>2–4</sup> In addition, it is often not appropriate for very ill patients to be referred to a psychologist or a psychiatrist due to physical symptoms, weakness, short prognosis and limited capacity for new therapeutic relationships.<sup>5,6</sup>

Cognitive behavioural therapy (CBT) is a psychological intervention which aims to help the patient recognise, prioritise and link thoughts, feelings, behaviours and physical symptoms<sup>1,7,8</sup> using both cognitive and behavioural techniques. Using cognitive techniques, it aims to identify and challenge negative thoughts, seeking to help the patient find alternative ways of thinking<sup>9</sup> and facilitates identification of causes of anxiety and ways to manage this. The behavioural aspect of CBT encourages relax-

ation, realistic goal setting and restructuring daily activities with an aim to increase enjoyment and satisfaction.<sup>10,11</sup>

Cognitive behavioural therapy has been shown to be useful for the management of psychological distress in cancer patients.<sup>2,12–17</sup> It has also been suggested to be of benefit for non-cancer patients in treating depression,<sup>7,10,18</sup> anxiety, panic, eating disorders,<sup>7</sup> chronic pain<sup>19</sup> and insomnia.<sup>20</sup>

The National Institute of Clinical Excellence (NICE) guidelines for depression<sup>21</sup> have recommended CBT as the treatment of choice for management of mild-to-moderate depression and in combination with antidepressants for severe, treatment resistant or recurrent depression. It is also recommended in the NICE guidelines for anxiety<sup>22</sup> as the treatment of choice for generalised anxiety and panic disorder, because of its long-term effectiveness.

There is little evidence for the use of CBT in palliative care populations<sup>1,4,23,24</sup> and no trials of CBT use in a hospice to date. However, some studies have suggested that it may be acceptable<sup>3,25</sup> and potentially effective for patients with advanced cancer.<sup>3,23,26</sup> The NICE guidelines for improving supportive and palliative care for adults with cancer<sup>27</sup> suggest CBT as a treatment for psychological distress in this patient group.

Correspondence to: Dr Tracy Anderson, Specialist Registrar in Palliative Medicine, Belfast City Hospital, Lisburn Road, Belfast BT9 7AB, Northern Ireland, UK.  
Email: t.anderson@doctors.org.uk

Brief interventions<sup>3,11,28</sup> and short training<sup>4,5</sup> in CBT techniques have been shown to be effective and it has been suggested that it may be appropriate for non-mental health professionals to treat milder disorders.<sup>3, 5,29</sup>

The aim of this study is to assess whether the use of CBT techniques for anxiety and depression in a palliative care population is an acceptable intervention, and whether a palliative care professional with short training can learn to appropriately apply such techniques for the benefit of hospice patients.

## Methods

A prospective feasibility trial was carried out in Northern Ireland Hospice, which provides specialist palliative care inpatient, outpatient, day hospice and community services.

### Inclusion criteria

Inpatients or patients attending day hospice who were willing to participate, were well enough and could communicate adequately to be part of a study which involved conversation, and who were able to give informed consent.

### Exclusion criteria

Patients who were confused, had dementia, difficulty communicating, were too weak or unwell to undergo the study or who were suffering from a psychotic disorder.

Eligible inpatients and day hospice patients were identified by the multi-disciplinary team over a 10-week period, and verbally invited to participate by the hospice social worker, then by letter, and given an information leaflet. The Hospital Anxiety and Depression Scale (HADS) was used to screen for anxiety and depression in the patients who consented to be part of the study as this has been previously validated in this patient population.<sup>12</sup> Patients who obtained a score of 8 or higher in either the anxiety or depression aspect of the scale<sup>30</sup> were invited to continue with the study.

The intervention was carried out by a Specialist Registrar in palliative medicine who attended two short training courses, totalling 5 days of teaching, in CBT techniques for cancer and palliative care patients, and was supervised throughout the project by a clinical psychologist.

A protocol was created for three or four sessions lasting between 15 and 45 min, based on recommendations from the literature,<sup>1,8,12,31</sup> and discussion with the supervisor, and was used as a guide for session content to allow some consistency to the intervention provided for each patient (Figure 1). A short intervention was chosen to enable it to be easily reproduced in daily practice.

During the first session, problems were identified and thoughts, feelings, behaviours and physical symptoms were linked using Padeskys 'Hot Cross Bun' model (Figure 2). This enabled patient led prioritisation of the problems and created a plan for the following one or two sessions. A summary of these problems was discussed at the beginning and end of each session, giving the patient an opportunity to change priorities or discuss new issues.

## Session protocol

### Session 1

- Discuss HADS responses
- Identify thoughts, feelings, behaviours, physical symptoms and link these
- Prioritise problems

### Sessions 2-3

- Review events of week and review homework
- Prioritise issues for session
- Content of sessions depended on whether main issues were negative thoughts, anxiety, decreased activity or terminal phase of illness

### Session 4

- Summary of work
- Summary of changes
- Goals for the future
- Planning for how to maintain changes, and prevent previous thoughts and behaviours from returning
- Repeat HADS scale

### Sessions 2 - 3 : Main Issues

- Negative thoughts - identify negative thoughts, challenge thoughts, create alternative statements, use of thought diary
- Anxiety - use diary identify ppt factors and symptoms. Discuss ways of avoiding and ways of managing anxiety. Learn relaxation techniques
- Decreased activity - use pleasure/mastery diary and life grid and make goals accordingly
- Terminal phase - focus on QoL and allow some control to be retained. Create realistic goals and promote activity unrelated to cancer. Plan for others to fulfill goals that patient cannot fulfill themselves. Encourage time with family. Talk about end of life issues if appropriate

Figure 1 Session protocol.

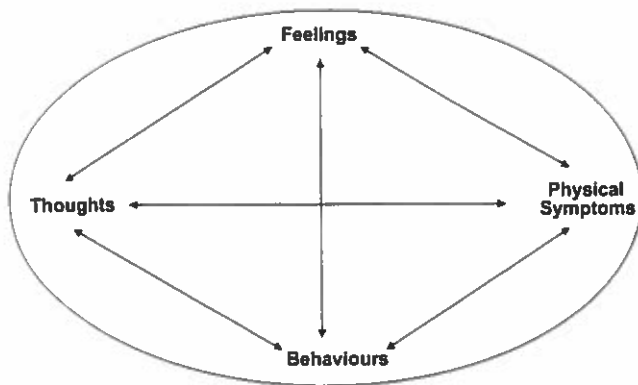


Figure 2 Padesky's 'Hot Cross Bun'.

In sessions 2 and 3, specific cognitive and behavioural techniques were used, depending on whether the main issues were negative thoughts, anxiety, decreased activity or end of life concerns. Table 1 contains a summary of the techniques used.

Guided discovery was used to identify negative thoughts and test the reality of those thoughts. This involved asking questions to clarify what the person believed and using diaries to record negative thoughts. We then discussed what evidence there was to support those beliefs and thoughts, and whether there was an alternative way to look at the situation.

The last session was used to summarise the work done in previous sessions and plan how to maintain any changes in thought or behaviour, and to create plans for the future.

Qualitative data was obtained from a taped semi-structured interview carried out at the end of the study and from summaries of the sessions which included feedback from the patient after each session. The interview was the main source of patient feedback relating to the acceptability of the intervention and was conducted by the hospice social worker, rather than the researcher, to reduce bias. It involved a discussion based around the expectations, positives and negatives of the intervention for the patient and whether they would have further CBT themselves, or recommend it to others. The interview questions were developed in conjunction with the

educational supervisor and the hospice research committee. The information from the semi-structured interview provided the initial framework for the qualitative analysis of data and additional categories were added after reviewing the data and feedback from the sessions. Recurring themes were identified, grouped into categories and placed within an overall framework. The data was then manually indexed and sorted within the thematic framework.

Quantitative data was obtained from HADS scores pre- and post-intervention and Visual Analogue Scales (VAS) measuring levels of happiness, relaxation, pain, energy and nausea, completed by the patient at each session. A paired *t*-test was used to compare the mean HADS scores pre- and post-intervention as this data was approximately normally distributed and the *t*-test is robust against moderate departures from normality. The VAS were not normally distributed so the pre- and post-intervention scores were analysed using a Wilcoxon Signed Ranks Test. A *P*-value of <0.05 was taken as the significance level.

The study was approved by the Local Ethics Committee (ORECNI).

## Results

Forty-six patients were admitted to the inpatient unit or attended day hospice over the 10-week period. They were discussed by the multi-disciplinary team and 22 of them did not meet the criteria for inclusion into the study, therefore 24 patients were invited to take part in the study.

Of the 24 patients approached, six declined, four did not meet the criteria on HADS, two withdrew after the first session and one died after the first session. Of the six who declined, two of them were not keen to talk through issues, and the others did not wish to take part in the study. Of the two who withdrew after one session, one was too unwell and the other chose not to participate further.

This left 11 participants, eight females and three males, five were inpatients and six attending day hospice. The age range was from 28 to 84 years with a mean age of 65

Table 1 CBT techniques used

Cognitive	Behavioural	Cognitive and behavioural
Linking thoughts, feelings, behaviours and physical symptoms	Life grid to identify previous activities and plan new ones	Thought diary
Identify negative thoughts	Create goals	Anxiety diary
Challenge thoughts	Plan activities	Identify causes of anxiety
Create alternative statements	Relaxation techniques	Discuss ways of avoiding and managing anxiety
	Create list of questions for doctor	Pleasure /mastery diary
		Weighing up advantages and disadvantages

and median of 73. Ten of the patients had a variety of different cancer diagnoses and one patient suffered from Motor Neurone Disease.

The following results are presented on the data provided by those 11 participants. There is no quantitative data available on the three patients who completed only one session as they had only one set of scores at the start of the study, and no follow-up scores for comparison. It was also not possible to obtain qualitative data on two of them as one was too unwell and one died. A follow-up interview was conducted with the patient who chose to withdraw after one session, and this is discussed at the end of the qualitative results.

**Qualitative results**

*Acceptability*

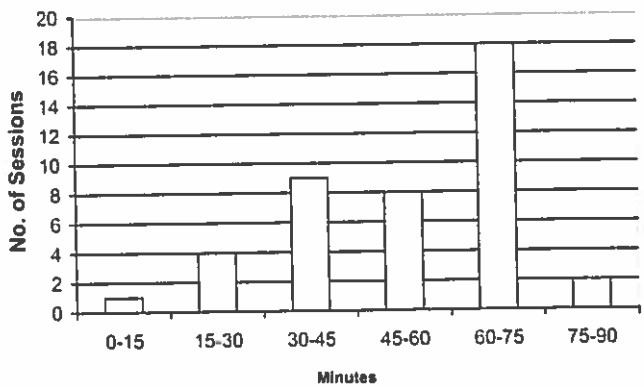
Overall, 10 of the 11 patients found this to be an acceptable intervention. Their expectations were varied. Five did not report any expectations and only one had a negative expectation, that it may be depressing, but did not find this in reality. Only one patient had apprehensions about the study and was reassured that they could withdraw at any time. Two had apprehensions about committing to a certain number of sessions initially but after the first session were happy to commit to further. Many of the patients commented that it was important for them to know that they could withdraw from the study at any time.

Nine of the 11 patients were satisfied with the number of sessions they received. The other two felt that further psychological input would be helpful, so follow-up with an appropriate person was organised. Two others stated that they were sorry to finish. Seven of the patients had three or four sessions as planned. Three patients had five sessions and one patient chose to stop after two sessions. All patients were assured that support would be available from the social work team in the hospice if they needed to discuss any issues at a later date.

Despite the plan being for sessions to last between 15 and 45 min, two-thirds of the sessions were longer than 45 min (Figure 3). Nine patients found the length of sessions acceptable, but two found them long and tiring. The patients felt that long sessions and homework may be inappropriate for those with very advanced disease, poor energy and concentration.

The sessions were originally planned on a weekly basis but of the 42 sessions carried out in this study, nine of them were deferred because the patient was too unwell. This meant that the time taken for each patient to complete the study ranged from 2 weeks to 14 weeks, with a median of 4 weeks and a mean of 5.4 weeks (Figure 4).

Nine patients said that they would consider a similar intervention again. The reason that two would not was



Data for Figure 3

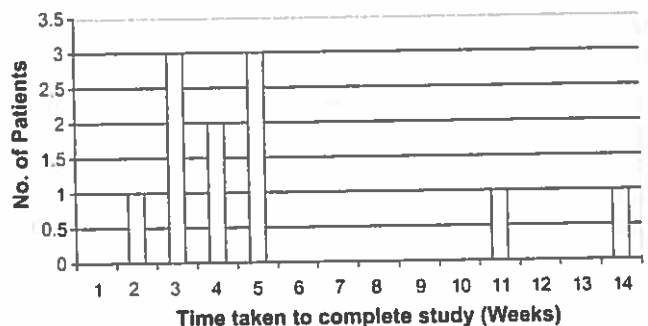
Duration of Sessions	0 - 15	15 - 30	30 - 45	45 - 60	60 - 75	75 - 90
Number of Sessions	1	4	9	8	18	2

Figure 3 Bar graph showing duration of sessions completed by participants.

tiredness due to advanced disease. All of the patients would recommend the intervention to other patients, providing that they were well enough and able to concentrate.

Only one patient found the intervention unacceptable because of lethargy caused by advanced disease and severe depression. Two inpatients with advanced disease found that they were too tired to talk for long periods of time. The same two, along with one other inpatient, were too tired to complete homework.

Other difficult aspects included the fact that often the negative thoughts experienced in this patient group are realistic, and patients can often be unable to fulfil their desired goals, due to poor physical condition. Two patients felt inhibited by poor concentration and memory and one patient found it difficult to think of upsetting things.



Data for Figure 4

Time take to complete (Weeks)	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Number of Patients	0	1	3	2	3	0	0	0	0	0	1	0	0	1

Figure 4 Bar graph showing time taken for patients to complete study.

### Effectiveness

Ten of the 11 patients said that they found the CBT interventions very helpful and eight said that they experienced an improvement in anxiety or mood as a result.

'I changed for the better and have a more positive attitude as a result of it'

Patient B

'I found it helpful to discuss things that were worrying me' and am 'coping much better after the sessions'

Patient E

The patients found the time with the therapist helpful, they appreciated the opportunity to talk, have someone to listen and someone to ask questions of.

'I was glad she was there and prepared to listen, she drew things out of me'

Patient D

### Most helpful cognitive and behavioural techniques

Specific techniques were used in eight of the patients, and all of these patients noted a change in thinking or behaviour. Of the other three patients, two were too weak and unwell for any techniques to be of benefit and one chose not to discuss issues further. The most useful techniques were:

#### *Linking thoughts, feelings, behaviours and physical symptoms*

Many found this a useful exercise which enabled them to identify and prioritise the problems and have an increased understanding of what they were experiencing. For example, patient A was able to link that when her friend stayed too late, this subsequently caused tiredness, poor sleep and then low mood the following day. She said that it was helpful to recognise this, and discuss ways of dealing with the issue.

#### *Diaries*

Four patients used diaries and reported that they found them very helpful, giving them more of an awareness of positive and negative activities and an increased awareness of negative thoughts and causes of anxiety, anger, low mood or pain. This allowed the patients to regain more of a sense of control and plan differently. The diaries used were activity, anxiety, anger, medication and pain diaries.

'It did bring out the awareness of what had happened at a time when I was anxious, and when I went into a really low mood, having the sessions helped me to identify the cause of it. The diary was helpful, I will keep it going when I go home. At the start I didn't think I

would find it useful but I did. When I read it back to myself I can see the patterns of things that happened'

Patient J

#### *Weighing up advantages and disadvantages*

This technique was helpful for a number of patients in various different ways. One illustration is from patient J, who did not want to use a wheelchair as they were:

'worried about what others would think, and worried about people seeing me, but after weighing it up I realised that using it would enable me to go outside, which I really want to do because it is a beautiful day'

#### *Identifying and challenging negative thoughts*

Eight of the 11 patients said that they found this helpful. They commented that being more aware of these thoughts and challenging them, took the focus away from negative thoughts and allowed them to think more positively and focus on other aspects of life.

'It helped me to think in a more structured way and helped me to think more positively about things'

Patient A

Creating alternative statements to challenge negative thoughts was helpful for three of the patients. Patient E had a CT scan followed by an oncology appointment every 3 months and prior to the appointment was anxious and preoccupied with what would be discussed. Her thoughts during these times were identified and a list of alternative statements was created. Her comment on this was:

'She gave me a list to help me have a positive attitude. I read it when I am feeling sorry for myself and it helps me'

#### *Creating goals and planning activities*

These were created from what was revealed in the diary, or through conversation, to be a source of enjoyment or achievement, or from reviewing things the patient previously enjoyed doing. New and realistic goals were then created accordingly.

#### *Creating a list of questions for the doctor*

Five of the 11 patients said that they had unanswered questions and found it beneficial to create a list of these. Examples of these were questions about medication, driving, scans, symptoms and questions about the future.

The patient who chose not to continue with the study after one session agreed to an interview for feedback. She said that during that session she enjoyed talking about things she could not talk to others about as she was feeling down at that particular time and needed to talk. She also

stated that it made her more aware of difficult issues, which she found helpful. Her reason for not continuing was that usually when she is feeling down she does not want to talk, and when she is feeling well she does not want to dwell on negative things. She did think it could be helpful to others and would recommend it, and would also consider it again herself in the future.

The patient who withdrew after two sessions did so because there were things which he chose not to talk about, things that were stored in 'boxes' which he felt may cause more harm than good to talk about. He did say that it was helpful to identify difficult issues, and did not find this distressing.

'We delved deep enough to satisfy me but not embarrass me'

He did not feel that any changes in thinking or behaviour resulted from the intervention but did comment that his mood had improved.

### Quantitative results

#### HADS

Nine of the 11 patients had an improvement in HADS scores. There was a decrease in anxiety and depression scores for seven patients, one patient had a decrease in depression scores only and one had a decrease in anxiety scores only. The mean HADS scores are illustrated in Figure 5, and the statistical data are summarised in Table 2.

Analysis of these mean scores using a paired *t*-test revealed that the improvement was significant for depression ( $P = 0.04$ ), anxiety ( $P = 0.03$ ) and combined scores ( $P = 0.03$ ).

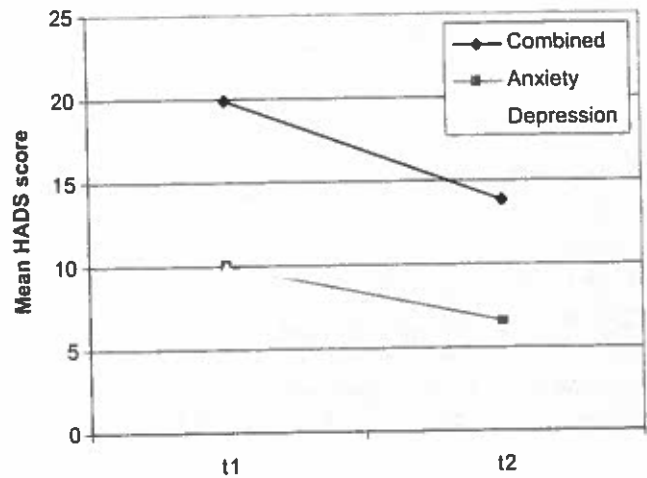
#### VAS

VAS scores for happiness, relaxation, pain, energy and nausea pre- and post-intervention were analysed using Wilcoxon Signed Ranks test and the only significant change found was an improvement in energy levels ( $P = 0.03$ ).

### Discussion

This study shows that the use of CBT techniques was acceptable to a proportion of palliative care patients with anxiety, depression or adjustment disorders, but highlights that the patients need to be chosen carefully.

It is not appropriate in patients who are confused or have difficulty communicating and may be less appropriate in patients who have poor energy, concentration and memory, and patients in the terminal stage of their illness.



Data for Figure 5

	t1	t2
Combined	19.9	13.8
Anxiety	10	6.6
Depression	9.9	7.2

Figure 5 Graph demonstrating change in mean HADS scores from t1 (pre-intervention) to t2 (post-intervention).

Three or four structured sessions were acceptable, and were an adequate number for most of the patients in this study. Long sessions were felt to be inappropriate for patients with very advanced disease with poor energy, concentration or memory. Therefore, it may be more suitable in a day hospice population or with inpatients that are not at the terminal stage of illness, and may be more appropriate if brief techniques are used as part of daily practice instead of planned sessions. Flexibility is necessary as some patients may want to complete sooner, and some may need further follow-up.

Such an intervention may be appropriate, along with antidepressants, in patients with severe depression<sup>21</sup> but that was not shown in this study, as the patient with severe depression did not find the intervention beneficial. In severe depression, it may be more appropriate for CBT to be provided by mental health professionals with more advanced training, but it may not always be appropriate to refer palliative care patients.

Table 2 Mean and standard deviation (SD) values of HADS scores pre (t1) and post (t2) intervention

	t1		t2		P
	Mean	SD	Mean	SD	
Anxiety	10	4.73	6.6	4.67	0.03
Depression	9.9	4.43	7.2	5.3	0.04
Combined	19.9	6.9	13.8	7.2	0.03

This study and other literature<sup>3,4,10</sup> suggest that it may be appropriate for mild-to-moderate disorders to be treated by a palliative care professional with training and supervision and suggest that training in CBT, along with supervision, may equip palliative care professionals to manage psychological problems more effectively.

The therapeutic relationship is important, but it is important to respect that not all patients want to talk about thoughts or feelings and it is important that they do not feel under pressure to do so.

The most useful techniques for the patients in this study were the use of diaries, identifying and challenging negative thoughts, weighing up advantages and disadvantages, linking thoughts, feelings and behaviours and creating goals. A written summary of the session was useful to help patients remember and review the issues discussed.

Eight of the 11 patients felt that their thinking or behaviour had changed as a result of the intervention, and anxiety and depression were improved in eight of the 11 patients. However, it is difficult to prove that these changes are due to the use of CBT techniques, as it was a small feasibility study without controls. Therefore, the quantitative data should be interpreted with this in mind. The interpretation of the VAS scores relating to physical symptoms needs to be done with particular care, because those symptoms will have been managed in other ways by the hospice team and we cannot make an assumption that any changes were a result of the CBT intervention.

A much larger sample would be necessary to test for significance and further studies would be appropriate to assess the effectiveness of the use of CBT techniques in this patient population.

If the results of a further trial confirmed evidence of the effectiveness of the use of CBT techniques in palliative care patients, this would be a useful intervention as it is non-pharmacological, is acceptable to most patients, and the training is short and inexpensive, and so can be provided to many members of the multi-disciplinary team to enable them to use these techniques as part of daily practice.

#### Acknowledgements

We would like to thank Northern Ireland Hospice for sponsoring the project and all the patients who agreed to take part in the study. We would also like to thank Maeve McCann and Dolorus Sweeney for their assistance and Tracy McTernaghan and Hazel Taylor for administrative support. A special thanks to Dr Anthony Byrne, who is the course organiser for the MSc in Palliative Medicine at Cardiff University which this project was part of, for all his teaching, advice and encouragement.

#### References

- 1 Moorey, S, Greer, S. Cognitive behavioural therapy for people with cancer. 2nd ed. Oxford: Oxford University Press 2002.
- 2 Greer, S. Psychological intervention. The gap between research and practice. *Acta Oncol* 2002; 41: 238–243.
- 3 Satterley, G. Developing a cognitive behaviour therapy service. *Eur J Palliat Care* 2006; 13: 210–211.
- 4 Mannix, KA, Blackburn, IM, Garland, A, Gracie, J, Moorey, S, Reid, B, *et al.* Effectiveness of brief training in cognitive behaviour therapy techniques for palliative care practitioners. *Palliat Med* 2006; 20: 579–584.
- 5 Sherwood, P, Given, BA, Given, CW, Champion, VL, Doorenbos, AZ, Azzouz, F, *et al.* A cognitive behavioral intervention for symptom management in patients with advanced cancer. *Oncol Nurs Forum* 2005; 32: 1190–1198.
- 6 Alexander, P. Psychology and palliative care. *Clin Psychol* 2004; 43: 40–44.
- 7 Hollon, SD. What is cognitive behavioural therapy and does it work. *Curr Opin Neurobiol* 1998; 8: 289–292.
- 8 Dein, S. Cognitive behavioural therapy in the palliative care setting. *Eur J Palliat Care* 2005; 12: 174–176.
- 9 Edelman, S, Lemon, J, Kidman, A. Group cognitive behavior therapy for breast cancer patients: a qualitative evaluation. *Psychol Health Med* 2005; 10: 139–144.
- 10 Beck, AT. The current state of cognitive therapy: a 40-year retrospective. *Arch Gen Psychiatry* 2005; 62: 953–959.
- 11 Lovejoy, NC, Matteis, M. Cognitive-behavioral interventions to manage depression in patients with cancer: research and theoretical initiatives. *Cancer Nurs* 1997; 20: 155–167.
- 12 Le Fevre, P, Devereux, J, Smith, S, Lawrie, SM, Cornbleet, M. Screening for psychiatric illness in the palliative care inpatient setting: a comparison between the Hospital Anxiety and Depression Scale and the General Health Questionnaire-12. *Palliat Med* 1999; 13: 399–407.
- 13 Greer, S, Moorey, S, Baruch, JD, Watson, M, Robertson, BM, Mason, A, *et al.* Adjuvant psychological therapy for patients with cancer: a prospective randomised trial. *BMJ* 1992; 304: 675–680.
- 14 Moorey, S, Greer, S, Watson, M. Adjuvant psychological therapy for patients with cancer. *Psychooncology* 1994; 7: 218–228.
- 15 Moorey, S, Greer, S, Bliss, J, Law, M. A comparison of adjuvant psychological therapy and supportive counselling in patients with cancer. *Psychooncology* 1998; 7: 218–228.
- 16 Levesque, M, Savard, J, Simard, S, Gauthier, JG, Ivers, H. Efficacy of cognitive therapy for depression among women with metastatic cancer: a single-case experimental study. *J Behav Ther Exp Psychiatry* 2004; 35: 287–305.
- 17 Tatrow, K, Montgomery, GH. Cognitive behavioral therapy techniques for distress and pain in breast cancer patients: a meta-analysis. *J Behav Med* 2006; 29: 17–27.

- 18 Ellis, P. Australian and New Zealand clinical practice guidelines for the treatment of depression. *Aust N Z J Psychiatry* 2004; 38: 389-407.
- 19 Holtom, N, Barraclough, J. Is the Hospital Anxiety and Depression Scale (HADS) useful in assessing depression in palliative care. *Palliat Med* 2000; 14: 219-220.
- 20 Montgomery, P, Dennis, J. A systematic review of non-pharmacological therapies for sleep problems in later life. *Sleep Med Rev* 2004; 8: 47-62.
- 21 NICE. National Institute of Clinical Excellence Guidelines on the management of Depression. 23. 2004. [Report]. <http://www.nice.org.uk/nicemedia/pdf/CG023NICEguideline.pdf> [accessed 9 July 2008].
- 22 NICE. National Institute of Clinical Excellence Guidelines on the Management of Anxiety. 22. 2004. [Report]. <http://www.nice.org.uk/nicemedia/pdf/CG022NICEguideline.pdf> [accessed 9 July 2008].
- 23 Uitterhoeve, RJ, Verhooy, M, Litjens, M, Potting, K, Bensing, J, De Mulder, P, *et al.* Psychosocial interventions for patients with advanced cancer - a systematic review of the literature. *Br J Cancer* 2004; 91: 1050-1062.
- 24 Hudson, P, Aranda, S, Kristjanson, L, Quinn, K. Minimising gate-keeping in palliative care research. *Eur J Palliat Care* 2005; 12: 165-169.
- 25 Cluver, JS, Schuyler, D, Frueh, BC, Brescia, F, Arana, GW. Remote psychotherapy for terminally ill cancer patients. *J Telemed Telecare* 2005; 11: 157-159.
- 26 Cocker, KL, Bell, DR, Kidman, AD. Cognitive behavior therapy with advanced breast cancer patients: a brief report of a pilot study. *Psychooncology* 1994; 3: 233-237.
- 27 NICE. National Institute of Clinical Excellence guidelines on Improving supportive and palliative care for adults with cancer. 2004. [Report]. <http://www.nice.org.uk/nicemedia/pdf/CSgSP.pdf> [accessed 9 July 2008].
- 28 Trask, PC, Paterson, AG, Griffith, KA, Riba, MB, Schwartz, JL. Cognitive-behavioral intervention for distress in patients with melanoma: comparison with standard medical care and impact on quality of life. *Cancer* 2003; 98: 854-864.
- 29 Given, C, Given, B, Rahbar, M, Jeon, S, McCorkle, R, Cimprich, B, *et al.* Effect of a cognitive behavioral intervention on reducing symptom severity during chemotherapy. *J Clin Oncol* 2004; 22: 507-516.
- 30 Zigmond, AS, Snaith, RP. The hospital anxiety and depression scale. *Acta Psychiatr Scand* 1983; 67: 361-370.
- 31 Farrington, A. Cancer, emotional responses and cognitive behavioural psychotherapy. *Eur J Cancer Care (Engl)* 1994; 3: 175.