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EFFICACY OF CLINICAL HYPNOSIS IN THE ENHANCEMENT OF QUALITY OF LIFE OF TERMINALLY ILL CANCER PATIENTS

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Abstract

The fact that terminal cancer patients experience considerable psychological distress is now undisputed, but the effectiveness of psychological treatments in relieving this suffering is less clear. The aim of the present research was to evaluate the efficacy of clinical hypnosis in the enhancement of quality of life of patients with far-advanced cancer. Fifty terminally ill cancer patients were randomly assigned to two groups: standard care and hypnosis. Patients in the standard care group received routine medical and psychological care. Their medical treatment included pharmacological management of pain and other symptoms following the World Health Organization's model of palliative care (WHO, 1990). The psychological support consisted of supportive counselling based on the cognitive existential therapeutic tradition. In addition to the standard care, patients in the hypnosis group received weekly sessions of hypnosis with a therapist for four weeks. Outcome measures included quality of life, as measured by *The Rotterdam Symptom Checklist* (DeHaes, Olschewski, Fayers, Visser, Cull, Hopwood and Sanderman, 1996), and depression and anxiety, as measured by *The Hospital Anxiety and Depression Scale* (Zigmond and Snaith, 1983). Results demonstrated that at the end of intervention patients in the hypnosis group had significantly better overall quality of life and lower levels of anxiety and depression when compared to the standard care group. It is concluded that hypnosis is effective in the enhancement of quality of life in terminally ill cancer patients.

Key words: cancer, clinical hypnosis, efficacy, palliative care, quality of life

Introduction

The fact that terminal cancer patients experience considerable psychological distress is now undisputed (Breitbart and Passik, 1993), but the effectiveness of psychological treatments in relieving this suffering is less clear. Psychological and social morbidity in these patients is high (Breitbart and Passik, 1993). Anxiety, demoralization, suffering, isolation, anger and depression are especially relevant to patients with advanced cancer. In addition, dying patients experience a heavy physical symptom burden. In one survey, 84% of cancer patients near death reported severe pain, 49% had difficulty breathing and 33% had nausea. Moreover, pharmacological treatment of these

Portions of these data were presented at the 1st International Conference on Cancer Pain Relief and Palliative Care, Athens, Greece, 1993.

symptoms may be associated with adverse side-effects (such as opioid-induced constipation, nausea, delirium or sedation) (Seale and Cartwright, 1984).

Significant numbers of people with cancer often experience substantial difficulties in coping with, and adjusting to, their illness and impending death. Although emotional distress and disruptions in daily functioning are a normal effect of cancer and its treatment, many patients experience enduring problems, especially depression and anxiety (Meyerowitz, 1980). The incidence of depression in cancer patients ranges from 20% to 25% and increases to 77% with higher levels of disability, advanced illness and pain (Bukberg, Penman and Holland, 1984). Interventions that facilitate more effective adjustment and coping should reduce this morbidity and improve quality of life. To date it appears that the optimal approach to treating physical, and especially psychological symptoms such as anxiety and depression, in cancer patients involves a combination of pharmacotherapy and psychotherapy. Such an approach is congruent with the palliative care philosophy which regards control of pain and other symptoms, and of psychological, social and spiritual problems, as paramount and fosters the active total care of patients with the goal of providing them and their families with the best possible quality of life (WHO, 1990).

Although substantial research over the past several decades has documented the nature and extent of negative psychosocial effects in cancer patients, only a few studies have focused on developing and evaluating clinical interventions geared to helping patients to cope more effectively. Such efforts are crucial given the prevalence of enduring distress identified among cancer patients.

Psychological interventions, in the form of individual or group counselling, have been shown to reduce psychological distress and depressive symptoms, improve quality of life in cancer patients and even have a significant effect on survival (Spiegel, Bloom and Yalom, 1981; Spiegel and Bloom, 1983; Spiegel, Bloom, Kraemer and Gottheil, 1989; Walker, Heys, Walker, Ogston, Hucheon, Sarkar, Ah-See and Eremin, 1999). Several therapeutic models — individual, family and group — have been described, the majority of which appear to be best-suited to (and have been tested with) non-terminal cancer patients. For example, in existential psychotherapy (Yalom, 1985) anxiety about death and uncertainty are confronted. This approach has been incorporated into supportive–expressive group therapy (Spiegel and Spira, 1983). Individual cognitive–behavioural therapy for high-risk cancer patients has also been used with encouraging results (Moorey and Greer, 1989; Moorey, Greer, Bliss and Law, 1998). A model that promotes active coping strategies has also been developed and tested (Fawzy, Cousin, Fawzy, Kemeny, Elashoff and Morton, 1990). Cognitive–existential group therapy has been used with patients with early breast cancer. Wood and Mynors-Wallis (1997) reported preliminary evidence for the effectiveness of problem-solving therapy in the care of terminally ill cancer patients. Problem-solving is a brief, simple psychological treatment that is based on the assumption that emotional symptoms are generally induced by problems of living. The treatment encourages patients to formulate ways of dealing with such problems both psychologically and practically.

Clinical hypnosis has been successful both in the care of children (Liossi, 1999; Liossi and Hatira, 1999 in press; Liossi, 2000) and adults with cancer (Liossi and Mystakidou, 1996), has been found to enhance the function of the immune system (Fox, Henderson, Barton, Champion, Rollins, Catalan, McCormack and Gruzelier, 1999; Gruzelier, 2001) and preliminary case studies of its use in palliative care have reported encouraging results (Kraft, 1989, 1990, 1992, 1993). Kraft found a combination

of psychotherapy and hypnotherapy beneficial in the alleviation of anxiety in patients suffering from widespread cancer and in the treatment of problems such as chemotherapy phobia, intractable pain, dyspnoea, insomnia and itching. Spiegel et al. (1989) reported an unblinded randomized controlled trial of 58 women (mean age 54.5 years) with advanced breast cancer. Patients were assigned to standard treatment or to standard treatment plus group therapy that consisted of weekly meetings with a support group. The latter group was further randomized into no-hypnosis and self-hypnosis arms to manage pain. The patients receiving group therapy experienced a statistically significant reduction in pain sensation and pain suffering (both $p<0.01$) over 10 months' follow-up, but there was no difference in frequency and duration of pain episodes. Self-hypnosis provided a further reduction in pain sensation ($p<0.05$). However, this patient population differed from the usual palliative care population in that they had a longer survival time.

Given that psychological treatment and support form a major part of the care of dying patients and their families, and that there are few controlled studies evaluating the effectiveness of different psychological treatments, there is a need for research into effective and feasible treatments for emotional distress in palliative care. The aim of the present research was to assess the efficacy of clinical hypnosis in the management of depression and anxiety, and the enhancement of quality of life for patients with far-advanced cancer. To our knowledge this is the first prospective randomized controlled clinical trial of the use of hypnosis in the palliative care setting.

Method

Patients

During a six-month period, new patients with far-advanced cancer who were referred for palliative care to the Pain Relief and Palliative Care Unit of the University of Athens, Greece, who were considered by the palliative care team to be able to complete a questionnaire and who gave informed consent, were entered into the study. Patients were excluded if they were considered too unwell, if Greek was not their first language or if their estimated survival, as judged by physicians, was less than four months. Further exclusion criteria included severe cognitive impairment and psychotic illness.

Study design

The present study combined quantitative and qualitative research methodologies. Eligible patients were randomized with the use of random tables to two conditions: standard care and standard care plus hypnosis. Patients in the standard care group received standard medical and psychological care provided by the Palliative Care Unit to all patients. Patients in the hypnosis group received hypnosis in addition. After completion of intervention patients in the hypnosis group were asked to participate in a semi-structured interview and to discuss their experiences of hypnosis. The treating physicians remained blind to the randomization outcome and the therapist administering the psychological interventions was blind to the patients' medication.

Procedure

The study involved four procedural steps:

- Assessment of quality of life, anxiety and depression at baseline.
- Interventions.

- Assessment of quality of life, anxiety and depression after interventions.
- Semi-structured interviews with patients in the hypnosis group.

Assessment of quality of life, anxiety and depression at baseline

All patients were asked to complete Greek translations of *The Rotterdam Symptom Checklist* (RSCL) (DeHaes, van Knippenberg and Nejit, 1990; DeHaes, Olschewski, Fayers Visser, Cull, Hopwood and Sanderman, 1996) and the *Hospital Anxiety and Depression Scale* (HADS) (Zigmond and Snaith, 1983)* on their first visit to the Unit. The majority of the patients completed the questionnaires on their own. Occasionally, however, they received assistance from relatives or friends.

Interventions

Patients in the standard care group received standard medical and psychological support offered at the Palliative Care Unit. The medical treatment consisted of pharmacological management of pain and other symptoms, as outlined by the World Health Organization (WHO, 1990) and is described in depth in the international literature (Doyle, Hanks and MacDonald, 1983; Twycross, 1994; Twycross and Wilcock, 2001). The treating physicians aimed to provide patients with the best possible symptom control. The psychological support consisted of four 30-minute weekly sessions of supportive counselling following the cognitive–existential model. This model integrates the existential and cognitive–behavioural psychotherapy approaches and its focus is on promoting patients' compliance with medical regimens, correcting distorted cognitive perceptions, facilitating grief work over multiple losses and impending death, enhancing problem-solving and coping skills to manage residual discomfort of physical symptoms, fostering a sense of mastery and self-worth and effectively using valuable but limited physical and mental energy. It draws on the existential ideas of Yalom (1985), the work on loss and grief by Bowlby (1980) and the cognitive–behavioural approach of Moorey and Greer (1989). The therapist does not adhere to a rigid sequence of interventions. Rather, through flexible adoption of issues raised by patients, most of the themes mentioned are ultimately covered.

In addition to the standard medical and psychological support, patients in the hypnosis group received, weekly, four 30-minute sessions of hypnosis. The hypnosis intervention consisted of induction, suggestions for symptom management and ego-strengthening, and post-hypnotic suggestions for comfort and maintenance of the therapeutic benefits during the following week. Inductions used were the arm levitation and the cloud fantasy technique. Relevant suggestions were made according to patients' predominant symptoms. Many patients asked for and received analgesic suggestions for residual pain and suggestions for diminished anxiety. Others received suggestions for nausea and vomiting management, insomnia, breathlessness and fatigue. Ego-strengthening consisted of general ego-strengthening suggestions, specific ego-strengthening suggestions to facilitate the discovery and enhancement of patients' inner coping strategies and specific suggestions to foster patients' sense of self-efficacy (Brown and Fromm, 1986).

* Two translators, native Greek speakers who had a high level of fluency in English, translated independently the scales from English to Greek. This comprised the 'provisional forward translation'. After this two more translators, native English speakers with a high level of fluency in Greek, independently translated the provisional forward translation back into English, i.e. without reference to the English original. The provisional translation had not been pilot-tested before being used in the present research.

Assessment of quality of life, anxiety and depression after interventions
All patients were asked to complete again the RSCL (DeHaes et al., 1996) and the HADS (Zigmond and Snaith, 1983) on completion of the interventions at four weeks.

Semi-structured interviews with patients in the hypnosis group
Patients in the hypnosis group were asked to participate in a semi-structured interview and to talk about their experience of hypnosis. The stimulus questions were:

- 'How was hypnosis for you?'
- 'What did you find most helpful about the intervention?'
- 'What did you find least helpful?'
- 'Is there anything that you would like to add, any comments or suggestions?'

The interviews lasted, on average, 10–15 minutes and every effort was made to keep both the assessments and the interventions as brief and unintrusive as possible.

Measures

RSCL
The RSCL (DeHaes et al., 1990; DeHaes et al., 1996) is a self-report measure to assess the quality of life of cancer patients. It comprises 39 items which are grouped on four scales:

- Physical symptom distress scale (23 items).
- Psychological distress scale (seven items).
- Activity level scale (eight items).
- Overall evaluation of life (one item).

Responses are given on a four-point Likert-type scale and cover the time period of the week prior to administration. For patients' symptom experience of both physical and psychological distress responses range from 'Not at all' to 'Very much'. For the activity level scale, responses range from 'Being unable' to perform an activity up to being able to do so 'Without help'. The overall evaluation of life is assessed on a seven-point Likert-type scale ranging from 'Excellent' to 'Extremely poor'. For the physical and psychological distress scales, therefore, the higher the score, the higher the level of burden or impairment. For the activity level and the overall quality of life scales the opposite is true: the higher the score, the better the function. Physical symptom distress level scores have a theoretical range of 23–92, psychological distress level scores range from seven to 28, activity impairment level scores from eight to 32, and overall evaluation of life scores from one to seven. The questionnaire may be self-administered or administered by an interviewer. Patients take, on average, eight minutes to complete it.

HADS
The HADS (Zigmond and Snaith, 1983) is a 14-item scale developed to provide a brief state measure of anxiety and depression. It is designed for use in medical outpatient clinics to detect clinical cases of depression and anxiety without contamination of scores by reports of physical symptoms. It has good psychometric properties. It consists of two subscales, one measuring anxiety and one measuring

depression, which are scored separately. Each item is scored from zero to three so the total scores range from zero to 21 for both the depression and anxiety scales. Higher scores indicate higher anxiety or depression. Scores of zero to seven are considered as normal, eight to 10 as indicative of mild depression, 11–14 as moderate and 15–21 as indicative of severe depression. There is evidence for the appropriateness of the HADS with the terminally ill population (Holtom and Barraclough, 2000). It takes only three to four minutes to complete.

Methodological considerations

Treatment fidelity

In line with recommendations by Moncher and Prinz (1991) to ensure uniform and consistent application of the treatment across patients, a treatment manual was prepared which described in detail the interventions for each of the two treatment conditions.* A manual enables clinicians to implement the treatment in a reliable and valid manner and also enables replication of the treatment by independent investigative teams. All the interventions were provided by the same trained therapist (CL) who was receiving regular supervision.

Results

During the six-month study period, 78 new patients were referred to the Palliative Care Unit. Fifty of these patients (age range 35–74 years, 23 women 27 men) were eligible for and agreed to participate in the study. Randomization resulted in homogeneous groups in terms of age, sex and outcome measures. Table 1 summarizes pre-intervention and post-intervention means and standard deviations for the RSCL (DeHaes et al., 1996) and HADS (Zigmond and Snaith, 1983) subscales. Both the RSCL (DeHaes et al., 1996) and the HADS (Zigmond and Snaith, 1983) scores are reported as raw scores. A Student's *t*-test confirmed that there was no difference between treatment groups in the pre-intervention means for the RSCL (DeHaes et al., 1996) and HADS (Zigmonth and Snaith, 1983) scores ($p>0.1$). Pre-intervention scores for the overall evaluation of life for the two groups were also non-significant (Mann–Whitney U test = 246.5; $p>0.1$).

Post-intervention scores for both the standard care and hypnosis groups show an improvement on anxiety, depression, physical distress, psychological distress, activity level and overall evaluation of life when compred with the corresponding pre-intervention measurements.

HADS scores

A repeated-measures analysis of covariance (ANCOVA) on the post-intervention anxiety scores using the pre-intervention anxiety scores as a covariate shows that there was a statistically significant decrease in anxiety scores for the hypnosis group compared with the standard care group ($F(1,47) = 113$; MSE = 2.78; $p<0.01$). Participants with an initial high anxiety level score had the potential for a greater decrease in anxiety than did those with an initial low anxiety score. Reformulating the ANCOVA to allow for this potential interaction does, in fact, show a statistically significant interaction between treatment and anxiety ($F(1,46) = 8.8$; MSE = 2.39; $p<0.01$). Figure 1 shows a plot of anxiety scores post-intervention against anxiety

*Available on request from the first author.

Table 1. Mean (SD) for HADS and RSCL scores across phase (pre-intervention, post-intervention) and groups

	HADS (anxiety)		HADS (depression)		RSCL (physical distress)		RSCL (psychological distress)		RSCL (activity level)	
	Pre-intervention	Post-intervention	Pre-intervention	Post-intervention	Pre-intervention	Post-intervention	Pre-intervention	Post-intervention	Pre-intervention	Post-intervention
Standard care	10.96 (4.43)	9 (3.8)	9.92 (4.38)	6.44 (3)	68.24 (14.82)	35.16 (3.9)	16.12 (4.96)	12.84 (3.14)	15.64 (2.89)	17.8 (2.6)
Hypnosis	11.92 (3.87)	4.6 (2.7)	11.04 (3.79)	3.6 (2.12)	61.92 (19.71)	30.6 (4.9)	17.36 (3.63)	9.57 (2.18)	17.20 (4.31)	19.68 (4.78)

HADS = *Hospital Anxiety and Depression Scale (Zigmond and Snaith, 1983);*
RSCL = *Rotterdam Symptom Checklist (De Haes et al., 1996).*

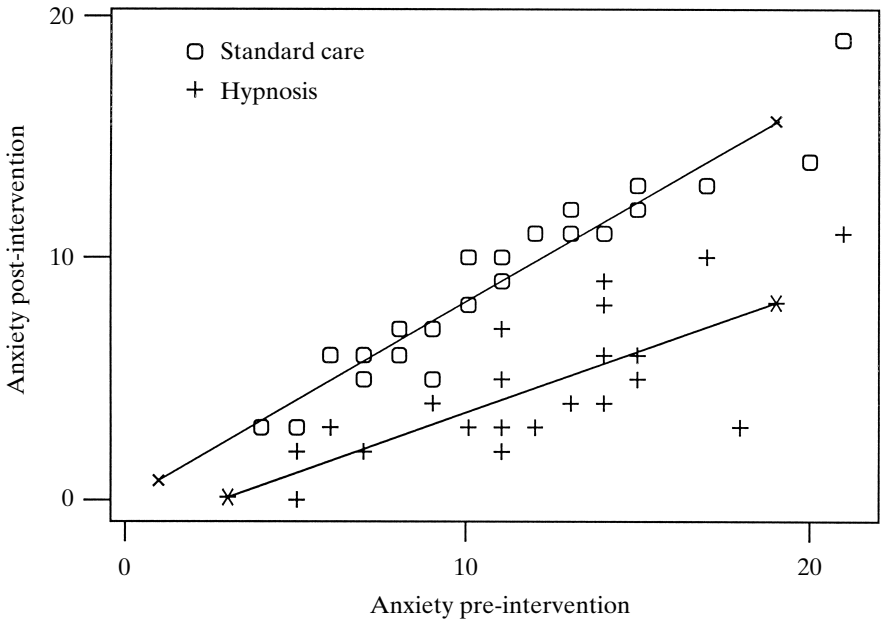

Figure 1. HADS (Zigmond and Snaith, 1983) anxiety scores post-intervention against anxiety scores pre-intervention across treatment groups. The lines superimposed are the lines of best fit under the analysis of covariance (ANCOVA).

scores pre-intervention, according to treatment group. The lines superimposed on Figure 1 are the lines of best fit under the ANCOVA.

Similarly, a repeated-measures ANCOVA on the post-intervention depression scores, using the pre-intervention depression scores as a covariate, shows that there was a statistically significant decrease in depression scores for the hypnosis group compared with the standard care group ($F(1,47) = 54.2$; MSE = 2.66; $p<0.01$). There was no significant interaction between treatment group and depression scores. Figure 2 summarizes the difference in depression scores between the treatment groups. The parallel lines superimposed on Figure 2 show the group-to-group mean difference of 3.43 units.

RSCL scores

Missing values

As RSCL scales are constructed in such a way that items belonging to a scale have high intercorrelation, it is possible to substitute values for missing data. An accepted way, followed in the present study, of handling missing values in the different subscales is the insertion of the personal scale mean of the respondent on a missing value. This procedure can be followed when the respondent has filled in at least 50% of the items on the subscale in question (De Haes et al., 1996).

RSCL scores

A repeated-measures ANCOVA on psychological distress, using pre-intervention psychological distress as a covariate, shows a statistically significant interaction between group and the level of psychological distress ($F(1,46) = 9.61$; MSE = 3.79; $p<0.01$). The

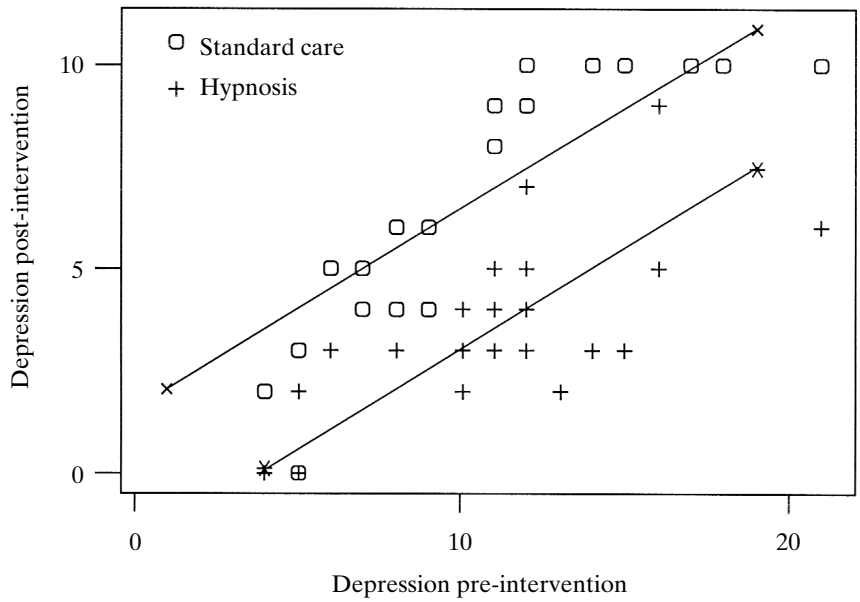

Figure 2. HADS (Zigmond and Snaith, 1983) depression scores post-intervention against depression scores pre-intervention across treatment groups. The lines superimposed are the lines of best fit under the analysis of covariance (ANCOVA).

trend captured by this interaction effect indicates that those participants with an initial high level of psychological distress had shown the greatest level of improvement and that this effect was greater in the hypnosis group. Figure 3 depicts this effect.

Similarly, a repeated-measures ANCOVA on physical distress, using pre-intervention physical distress as a covariate, shows that there was a statistically significant decrease in the physical distress scores for the hypnosis group compared with the standard care group ($F(1,47) = 12.74$; MSE = 19.94; $p<0.01$). In this analysis the covariate was not statistically significant ($F(1,47) = 0.31$; MSE=19.94; $p>0.1$) and removing the covariate from the model does not affect the conclusion since the mean physical distress level post-intervention in the hypnosis group was lower than the post-intervention mean physical distress level in the standard care group (Student's t-test = 3.65; df = 48; $p<0.001$).

For activity level impairment an ANCOVA with baseline impairment as a covariate shows that there was difference between the post-intervention means for the two groups ($F(1,47) = 0.86$; MSE = 2.94; $p>0.1$).

A chi-square test of association confirmed that the distribution of ratings of life satisfaction for the 50 patients differed between treatment groups (chi-square test = 17.20; df = 4; $p>0.01$). The ratings were stochastically larger in the hypnosis group compared with the standard care group. Isolation of the linear component from this chi-square analysis confirms the strong shift in location between the treatment groups, with the more favourable ratings in the hypnosis group (chi-square test = 15.3077; df = 1; $p>0.01$). There are no statistically significant quadratic, cubic or quartic terms in the orthogonal decomposition. An ordinal logistic regression analysis, using initial evaluation of life as a co-factor, gives qualitatively similar results as the above chi-square analysis.

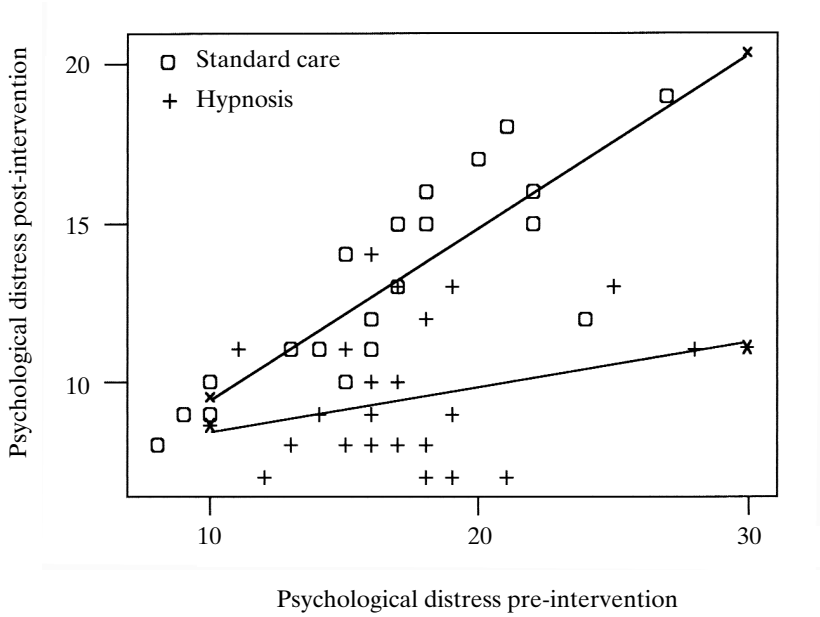

Figure 3. RSCL (DeHaes et al., 1996) psychological distress post-intervention against psychological distress pre-intervention across treatment groups. The lines superimposed are the lines of best fit under the ANCOVA.

Semi-structured interviews

Semi-structured interviews were conducted with patients in the hypnosis group within two weeks of completion of the interventions. The interviews were tape-recorded, transcribed and content analysed. A range of responses was elicited in reaction to the stimulus questions. The predominant themes, along with representative quotes from patients, are summarized below for every question.

Question 1 'How was hypnosis for you?'

Hypnosis was described both as something special and as an everyday experience:

'When in hypnosis I feel as if I leave my sick painful body behind and move freely anywhere I want, real or imaginary'

'I have never felt like this before, it is as if something is happening to my mind, I switch to a different mode'

'I cannot describe it in words, but it was different, special. The closest I can get is that it reminded me of when, as a child, I was playing with my brother pretending to be deep sea divers looking for Atlantis'

Hypnosis as an everyday experience:

'I was expecting something dramatic, that I will feel like a zombie, maybe, but to my surprise it was no different than my everyday experiences, I was just feeling very relaxed'

'I am still not sure if I have really been hypnotized, it did not feel as anything special'

'I was deeply relaxed. I had not felt so relaxed since I got ill'

Question 2 'What did you find most helpful?'
Patients used hypnosis primarily for physical and psychological symptom control and they reported that hypnosis helped them to feel better in themselves and more able to cope with this stressful period in their lives.

Symptom control (physical):

'It was really good for my insomnia'

'It made a difference to my nausea and vomiting'

'It helped my breathlessness. Before, with the first sign of dyspnoea I was panicking and made things worse. Now, I just relax and my chest feels lighter'

Symptom control (psychological):

'It has helped a lot with my anxiety. I feel much less anxious now. And my husband has noticed the difference'

'I was feeling very low, after our meetings I feel more cheerful, I can enjoy life more now'

Increased self-efficacy:

'I feel stronger, more able to cope'

'It may sound silly, but I feel more confident that I can deal with this tragedy in my life'

'I felt more in control of myself and the situation and my problems seemed more manageable after my hypnosis'

Question 3 'What did you find least helpful in the intervention?'
Patients were critical of the practical issues involved in the administration of the treatment, the dependency on the therapist and the cognitive demands of the task.

Practical problems:

'It is difficult for me to travel to the hospital'

Dependency on the therapist:

'I wish you could teach me how to do it myself or with my wife's help'

The degree of energy and concentration required:

'It was OK but at the end I was feeling very tired, sometimes exhausted'

Question 4 'Is there anything that you would like to add, any comments or suggestions?
Various themes emerged, including the timing and purpose of the intervention, and the significance of the relationship with the therapist.

Timing of the intervention:

'I wish I had been taught this technique at the beginning of my disease. It would have made my life easier'

Purpose of the intervention:

'I am not sure if it is worth it at this stage, I will die soon anyway'

Relationship with the therapist:

'I felt very close to another human being and it was good'

'I felt understood and valued by my therapist and this has helped me to understand and value myself'

Discussion

The primary aim of palliative care is to improve quality of life and, ideally, this should be measured as one of the main end-points of care. The aim of the present study was to assess whether the global quality of life and psychological distress of terminally ill cancer patients is improved with the addition of hypnosis to the standard medical and psychological care provided. Results demonstrated that hypnosis is effective in decreasing the anxiety and depression experienced by patients and in enhancing their psychological quality of life. Hypnosis did not provide an additional benefit in the physical quality of life and the activity level of the individuals.

In line with previous studies (Spiegel et al., 1981; Spiegel and Bloom, 1983; Moorey and Greer, 1989; Spiegel et al., 1989; Moorey et al., 1998; Walker et al., 1999) there was a significant decrease in the anxiety and depression and general psychological distress experienced by patients. In a stressful event such as cancer, the border between normal psychological reaction and psychiatric disorder is difficult to establish; therefore it is often more useful to think in terms of adjustment to stress. Psychological distress, such as depression and anxiety, in the terminally ill can occur, among other things, as a consequence of specific negative conditions inherent in the disease, such as pain and other symptoms, ambiguity, conflict, novelty and complexity. One's appraisal of the disease as a threat to the physical, psychological, spiritual and social existence of the individual; a poor, self-assessment of one's ability to cope with the threat; and ineffective attempts at problem-solving and finding meaning in the life lived and beyond the lifespan. The hypnotic intervention focusing on symptom management and ego-strengthening succeeded in reducing emotional distress, improving mental adjustment to cancer and promoting effective coping strategies. It decreased anxious mood, restlessless and anxious thoughts, depression, grief, demoralization, low self-esteem and pessimism.

It is important to emphasize the understanding of the patient as a human being and not simply as a cluster of symptoms to be treated with a bewildering array of medicines, complementary and psychological therapies. Psychological interventions in palliative care, in addition, have to be time-limited and not require special cognitive abilities. The study provides evidence that, for a subpopulation of terminally ill patients at least, hypnosis is a viable option and can make a difference within a relatively short time period. There need not be a dichotomy between the models of palliative and curative care and it would be useful for patients to be taught hypnosis early in their encounter with cancer. This aspect warrants further investigation as the majority of patients in this study reported that they would rather be taught hypnosis earlier in their illness.

The improvement in physical symptom scores was great in both groups, but the benefit achieved in the two groups was comparable in a clinical sense. This could reflect a 'failure' of hypnosis to improve dramatically the physical aspect of quality of life over time or simply the fact that the patients' medication was primarily responsible for their improvement, with the psychological interventions making a limited contribution. Physicians were constantly titrating the medication so as to achieve the best possible symptom management. Similarly, the fact that hypnosis did not have an effect in the activity level of patients may be understood in the light of the fact that activity level is primarily determined by the functional status of patients, which in turn is determined by their disease status.

Several limitations to the present study should be noted. First, the patients in this study were highly selected in that only those well enough to complete the questionnaires were entered. The results do not, therefore, give a true reflection of the overall palliative care patient population and are biased in favour of those fit enough to complete the study period. Many of the patients were too unwell to complete the questionnaires, and many found them difficult to complete. The study of quality of life and psychological distress in palliative care is difficult because of the short survival and poor cognitive condition of terminal patients. Patients taken into care by palliative care services represent different populations: short survivors for whom the process of care is mainly aimed at a 'good death' and medium/long survivors with different illness burdens in terms of consciousness, disability or pain. Complex ethical issues also surround the recruitment of terminally ill patients in research studies. Outcomes of concern to patients (for example, existential meaning) may be difficult to evaluate because of the lack of formal assessment tools and the difficulty of quantifying this type of information. In recent literature, the practical feasibility of clinical studies in patients treated by palliative care services has been questioned. Nonetheless, there is consensus that the palliative care process should be evaluated considering several perspectives and methodologies (Liossi and Mystakidou, 1998).

Second, there are problems inherent in the use of the particular measures used in the present research, that is the RSCL (DeHaes et al., 1996) and the HADS (Zigmond and Snaith, 1983), in the palliative care setting. The RSCL (DeHaes et al., 1996) was developed for use with cancer patients with relatively early stage disease undergoing chemotherapy or follow-up. Consequently, several of the physical symptoms items apply most directly to toxicity of treatment. It may well be, especially in those patients with very advanced disease, that other non-health-related factors, such as concern over financial matters or spiritual concerns, are also relevant determinants of an individual's quality of life along with the physical factors, such as pain or shortness of breath, assessed by the RSCL (DeHaes et al., 1996). Although a number of symptom assessment tools have been developed which may be appropriate for assessing palliative care patients (for example, the *Edmonton Symptom Assessment System* (ESAS) Bruera, Khuehn, Miller, Selmser and Macmillan, 1991, the *Hospice Quality of Life Index — Revised* (HQLI) (McMillan, 1996) and the *McGill Quality of Life Questionnaire* (Cohen, Mount and Strobel et al., 1995), the definitive quality of life tool suitable for use in palliative care has still to be constructed. Concerning the HADS (Zigmond and Snaith, 1983), some of its items, such as 'I feel as if I am slowed down', 'I still enjoy the things I used to do', might reflect the physical illness rather than psychological distress. However, despite its limitations there is currently no more suitable self-report assessment measure for palliative care patients than the HAD scale (Zigmond and Snaith, 1983).

Third, in the present study information as to whether patients required assistance from nursing staff or carers to complete their questionnaires was not collected. This was an omission, as it is well-documented that quality of life ratings from patients, families and staff are not interchangeable. Extreme caution has been advised when combining ratings from several different raters in evaluating a single patient (Groenvold, 1999).

Finally, it should be kept in mind that in the design of a controlled clinical trial, the choice of the control treatments is of great importance. Few people would accept the use of a placebo, whatever that would be in the case of hypnosis, in the terminally ill. In the present study, supportive counselling was used as a control treatment. Future studies in hypnosis and palliative care require sound designs, larger sample sizes, reliable blinding, and specific and clinically relevant outcome measures, including the effect of the concurrent use of conventional therapies.

Despite these limitations, however, the present study suggests that there is evidence to support the use of hypnosis in the palliative care setting. Patients and their families should be aware that pharmacological, anaesthetic and radiotherapeutic treatments, and to a lesser degree surgical treatment, represent the primary and most effective medical interventions for cancer pain and other physical symptoms at the terminal stage of cancer (Foley, 1985). However, as an adjunct to medical care, hypnotic techniques administered in a cognitive existential context can also promote optimal functioning and foster quality of life by encouraging patients and family caregivers to participate actively in the control of symptoms and in the acquisition of specific skills that can reduce physical and psychological symptoms, increase self-efficacy and instil hope.

Cognitive–behavioural interventions focus on the interactions of thoughts, feelings and behaviours of the patient. These are negatively affected in advanced disease. The nature of cognitions (thoughts or visual images) has an impact on the level of anxiety, suffering and physical symptoms, especially pain. Negative and self-defeating cognitions produce a sense of hopelessness and suffering and an increase of physical symptoms. Alternatively, having a positive attitude and accepting illness as a challenge (which requires enhancing old skills and learning new ones) leads to a greater sense of control and self-efficacy in the face of uncontrollable factors related to disease progression. The existential approach is particularly valuable at the final stage of life because it emphasizes authenticity and honest confrontation with, for example, the finite nature of life, freedom to choose and accepting responsibility for one's life and death. Clinical hypnosis has been used successfully for the alleviation of a variety of cancer-related symptoms, including pain. It promotes a sense of control in the patient over the effects of cancer and can easily be combined with and enhance the effect of other psychotherapeutic modalities. Cognitive–behavioural existential methods and clinical hypnosis can be integrated successfully in the treatment of terminal cancer patients. Their underlying theoretical assumptions are compatible, the clinical application of treatment is similar in several respects, and each potentially offers aspects of care that can benefit the other approaches.

Overall, it seems likely that the terminal cancer patient is in a unique position to benefit significantly from clinical hypnosis because the focus of care is on symptom manage and enhancement of quality of life. At a time when there is a natural propensity for introspection, working with patients to provide them with a skill with which they can management their symptoms and gain a sense of self-worth and self-efficacy

can be an empowering experience in itself. Moreover, hypnotic treatment can easily be integrated into the existing pattern of medical management.

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