

Original Article

Healing by Gentle Touch Ameliorates Stress and Other Symptoms in People Suffering with Mental Health Disorders or Psychological Stress

Clare Weze¹, Helen L. Leathard², John Grange³, Peter Tiplady⁴ and Gretchen Stevens¹

¹The Centre for Complementary Care, Muncaster Chase, Ravenglass, Cumbria, CA18 1RD, ²Faculty of Health and Social Care, St Martin's College, Lancaster, Lancashire LA1 3JD, ³Centre for Infectious Diseases and International Health, Royal Free and University College Medical School, 46 Cleveland Street, London W1P 6DB and ⁴Meadow Croft, Wetheral, Carlisle, Cumbria CA4 8JG, UK

Previous studies on healing by gentle touch in clients with various illnesses indicated substantial improvements in psychological well-being, suggesting that this form of treatment might be helpful for people with impaired quality of mental health. The purpose of this study was to evaluate the effectiveness and safety of healing by gentle touch in subjects with self-reported impairments in their psychological well-being or mental health. One hundred and forty-seven clients who identified themselves as having psychological problems received four treatment sessions. Pre- to post-treatment changes in psychological and physical functioning were assessed by self-completed questionnaires which included visual analogue scales (VAS) and the EuroQoL (EQ-5D). Participants recorded reductions in stress, anxiety and depression scores and increases in relaxation and ability to cope scores (all $P < 0.0004$). Improvements were greatest in those with the most severe symptoms initially. This open study provides strong circumstantial evidence that healing by gentle touch is safe and effective in improving psychological well-being in participants with self-reported psychological problems, and also that it safely complements standard medical treatment. Controlled trials are warranted.

Keywords: alleviation of symptoms – complements medical treatments – gentle touch – healing – psychological well-being – relaxation – stress

Introduction

Anxiety and depression are among the most common mental health disorders encountered in primary care (1), with episodes of depression typically lasting for 12–20 weeks (2). Psychological stress resulting from bereavement, major life events or stressors in the external environment has been associated with depressive disorders in some individuals (3,4), and contributes considerably to general morbidity and health care resource use in the community (5).

Although evidence of the efficacy of antidepressants is robust, current pharmacotherapeutic management of depression is

frequently imperfect due to inadequacies in dosage and duration (6,7). Adherence to prescribed medication may be erratic (7,8) due in part to adverse effects, which usually begin before the therapeutic effect is achieved (9) and medication is tolerated less well by patients with mild to moderate depression (10). Poor expectations of improvement are a consequence of the negative cognitive set; namely, the tendency to view self, future and world in a negative manner (11), which is associated with depressive disorders and which contributes to non-adherence (12). Furthermore, many patients with major depression require long-term maintenance therapy to prevent relapse or recurrence (13–15) and for these people adverse effects of medication are particularly problematic.

Depression is now conceptualized as a syndrome with biological, psychological and social influences (16), and is

For reprints and all correspondence: Clare Weze, St Martin's College, Bowerham, Lancaster, Lancashire LA1 3JD, UK. Tel: +44-1524-221718; E-mail: clare.weze@btinternet.com

perhaps, therefore, likely to respond to a multidimensional treatment strategy. Favorable outcomes have already been associated with combinations of treatment modalities (17,18), where synergistic effects are likely. The characteristic remit–recur cycle of depression (19–21) means that appropriate treatment approaches must be ongoing, safe, acceptable to patients and as free from adverse effects as possible. Healing by gentle touch as described by MacManaway and Turcan (22), and practiced at the Centre for Complementary Care in Cumbria (The Centre) and elsewhere, meets these criteria and merits evaluation as a treatment modality for people with mental health disorders (23–25).

Complementary Therapies and Mental Health Care

Although there is increasing use of various complementary therapies in the treatment of patients with mental health disorders (26–29), little published research focuses on the effects of touch therapies (which include Reiki and Therapeutic Touch), on such populations, or on healing such as that carried out at The Centre. The safety of many complementary modalities is, however, an area lacking robust investigation (30,31) particularly in relation to mental health.

Interestingly, improved psychological functioning in both healthy participants and in those with a variety of ailments is a common outcome of many touch therapies (32–34). One study, using healthy participants and a single group repeated measures design, found that Reiki Touch significantly reduced a state of anxiety and increased IgA levels, indicating modulation of the stress response (35). Other workers have measured the effects of guided imagery, meditation, Homeopathy, Ayurvedic medicine and Reiki, and found that subjects with serious mental illness (including schizophrenia, bipolar disorder and depressive disorder) reported improvements in emotional stability, well-being and concentration following treatment (36). Outcomes of such therapies for subjects with mental health problems are therefore worthy of investigation.

Healing at The Centre for Complementary Care

The Centre where the current evaluation was conducted has been serving an area of rural and urban social deprivation and poor health for 12 years and, functioning as a charity, has a history of treating all those who attend, regardless of their ability to pay. It is known as a place in which measurable, self-assessed improvements in psychological and physical functioning are achieved regularly (23–25,37,38). Some of the clients visiting The Centre are referred formally by medical practitioners but most are self-referred, attending as a result of recommendations by either local health care professionals or social contacts.

The Centre's principal therapeutic modality is healing by gentle touch, as described below. It is non-invasive, applicable to any health deficit and complementary to medical treatments.

According to Dixon (39) this type of approach to healing appears to trigger or enhance physiological healing processes, and this notion is consistent with our own understanding as discussed in detail by Weze *et al.* (40). In a preliminary study, Tiplady (41) reported that healing at The Centre improved physical and psychological functioning in the majority of 110 subjects with various ailments. A further study of 300 clients with a wide range of ailments has confirmed benefits to both psychological and physical functioning (25). Analysis of data from people with specific categories of ailments has revealed psychological benefits of healing in people with musculoskeletal disorders (23) and with cancer (24). We have also identified a subgroup of 147 clients who attended The Centre with psychological problems, identified as described below, occurring alone or as part of more complex illness, and the analysis of their data is presented here. In describing this work we will use the term 'psychological problems' to encompass the whole range of (often ill defined) mental health-related ailments reported by the clients and detailed in Table 1.

Table 1. Characteristics of the study population of 147 subjects with mental health disorders who completed entry and post-treatment questionnaires (percentages in parentheses)

Age and gender	
Median age (years)	43 (range 16–80, interquartile range 38–55)
Male	48 (33)
Female	97 (66)
Gender undisclosed	2 (1)
Condition	
Anxiety	32 (22)
Bereavement	16 (11)
Depression	32 (22)
Psychosexual problems	1
Psychological stress	61 (41)
Seasonal affective disorder	3 (2)
Schizophrenia	2 (1)
Duration of condition	
<1 year	32 (22)
1–5 years	51 (35)
>5 years	23 (16)
Undisclosed	41 (28)
Treatment status on entry to study	
Treatment	107 (73)
No treatment	39 (27)
Undisclosed	1
Types of treatments	
Medication	36 (24)
Counselling/psychotherapy	9 (6)
Medication and counselling/psychotherapy	18 (12)
Undisclosed	44 (30)

Methods

Participants

New clients with self-reported psychological problems attending The Centre for treatment between 1995 and 2001 were invited to participate in the ongoing program of evaluation of healing. Inclusion criteria were as follows: willingness and ability to participate by filling in questionnaires, age at least 16 years, notification of depression/anxiety/psychological stress/other mental health problems on the questionnaire, completing a post-treatment questionnaire after four treatments that were given within a 4–6 week period.

Exclusion criteria were as follows: previous treatment at The Centre, failure to complete the course of four sessions and failure to complete both entry and post-treatment questionnaires. The present study, as a continuation of that reported by Tiplady, (41) received ethical approval from the local Health Authority. Furthermore, the research process was consistent with St Martin's College 'Ethical Principles and Guidelines for Research Involving People' (2002). The purpose and requirements of the study were explained to each subject both verbally and in writing. Confidentiality, anonymity and permission to withdraw from participation without any detriment to treatment were assured, and consent was evidenced through their completion of the questionnaires.

Intervention

The research participants received four 1 h healing sessions within a 4–6 week period, undertaken by either of two therapists, although one treated 90% of the subjects in this study. The Centre's standard practice commences with a welcoming and evaluative conversation during which the therapist ascertains the client's views of the presenting problem and describes what the treatment will involve.

Although it is conceivable that some people might have reservations about being touched by the therapist none has been expressed by clients attending The Centre. After these preliminaries the evaluation study is explained and the client is invited to complete as much as they wish of the pre-treatment questionnaire. The treatment then involves lingering, firm but gentle, non-invasive touch on the head, chest, arms, legs and feet for approximately 40 min, most usually while the client lies comfortably on a treatment bed, or while seated comfortably if the client prefers.

The touch is described by the Director of The Centre as follows: 'Gentle Touch is not derived from the techniques of Reiki, Therapeutic Touch or Massage. It is a light touch, with no greater pressure than one would exert in soothing a child's brow or laying a hand on a forehead to test temperature. The hands do touch the (clothed) body, sometimes with fingertips only and sometimes with the flat palm of the hand. There is no manipulation, stroking or kneading. The length of time a hand is held in one place depends upon the response, which is felt as a current or magnetic connection. There is no attempt to direct

this current or to change energy flows. The practitioner works on an intuitive level, trusting the body's own self-healing mechanisms to re-establish balance, mentally, physically and psychologically. The requirement for both client and practitioner is for openness and concentration rather than willed results. "Getting our hands off the steering wheel" allows the body to do its own fine tuning. The gentle touch is like a battery charger that boosts the energy needed to do this, and interestingly, the person relaxes ever more deeply as this process takes place.'

This touch provides a point of contact between healer and client. By moving progressively around the body, from head to feet on one side and then feet to head along the other, the healer is attentive to each area of the person in turn. From a client's perspective, the touch enables awareness of the healer's attentiveness to each area of their body in turn. The lingering of the healer on places where disease has been reported by the client, or recognized by the healer, evidences the especial attention being paid to those places.

Informal conversation concerning the health and well-being of the client, along with reports of any physical, mental, emotional or spiritual changes since the previous session, take place while the treatment is occurring. Clients may also drowse, sleep or talk as they feel inclined. A 10 min rest concludes the session. Although a simple, repeating pattern of touch is followed by the therapist at each session, successful treatment depends not upon an exact physical routine, but on sensitive response to the altering circumstances of the subject, concentration as in meditation or contemplative prayer, and the ability to listen sympathetically both to the voice and the body of the client. Healing treatment is more truly defined by relationship than by technique.

Measures

The main research tool was a questionnaire incorporating visual analogue scales (VAS), and the EuroQoL (EQ-5D), an extensively used and validated generic state of health measure (42–44). VAS were used to monitor clients' subjective scores of their degrees of physical (pain, disability, immobility, sleep disturbances, reliance upon medication, ability to participate in usual activities) and psychological (stress, panic, fear, anger, relaxation, coping, depression/anxiety) functioning.

End point descriptors were used to help clients to locate their position on the scale, for example: 0 = 'no stress' to 10 = 'severe stress'; 0 = 'coping badly' to 10 = 'coping well'. In the case of sleep disturbances, 0–3 = 'sleeping too much', 4–7 = 'sleeping well' and 8–10 = 'sleeping badly'. Prior expectation of treatment effect was assessed on a VAS where 0 = 'expect nothing', 5 = 'see what happens' and 10 = 'expect a lot'. The EQ-5D asked participants to choose statements that best described their state of health at that moment from self-care, usual activities, pain/discomfort and anxiety/depression subscales. Finally, they indicated their general health status on a VAS where 0 = 'worst possible state' and 100 = 'best

possible state'. The use of more than one scale to assess key variables provided a means of triangulation by which consistency and, therefore, reliability of the participants' self-assessments could be monitored.

Additional factors that were monitored included demographic characteristics of participants, the duration of any medical condition that led to their attendance at The Centre, medical history, prior expectation of treatment effect, post-treatment satisfaction and previous experiences of complementary therapies. Participants taking medication at entry were asked to circle statements indicating any or no changes in consumption of their medicines on the post-treatment questionnaires.

Analysis

The analysis presented is based on data that is collected as The Centre's normal means of monitoring the effectiveness of its provision. The data set extracted for the present statistical analysis was simply of a group of clients who were relatively homogeneous in having attended for four sessions of healing within 4–6 weeks and completed their follow-up questionnaire at that time. Four sessions is the usual minimum number of sessions attended by clients. The experience of the Director attests to this number providing the clearest indication of whether or not people are benefiting from their visits, and therefore whether or not there is any point in them continuing.

The participants completed the full questionnaire provided for all clients of The Centre but the present analysis will focus specifically on psychological and related (pain, sleep) parameters. Subjects completed the questionnaire before their first treatment and completed a second one after their fourth treatment. Questionnaires were anonymized by marking each with a unique number allocated at the start of the study.

Differences between entry and post-treatment scores were calculated and analyzed statistically using Wilcoxon's matched pairs and signed ranks test for paired data. The EQ-5D data were analyzed by assigning each category (no problems, moderate problems, severe problems) a score from 1 to 3, respectively, and using pre- to post-treatment differences in category choice for each subject as the basis of the statistical comparison.

In separate analyses, participants were subdivided according to baseline (at entry) severity of stress, pain, panic, fear, anger, sleep disturbance and coping ability. Changes after treatment were assessed comparatively in order to determine whether or not the degree of benefit they experienced was influenced by the initial extent of their distress, discomfort or other disease. Data collected on subjects' prior use of complementary therapies were analyzed via subgroup comparisons, to determine any effect of prior experience on outcomes.

The Statistical Package for Social Sciences (SPSS Chicago, IL, USA, 1998) version 9.0 for Windows was used for all statistical analyses.

Results

Characteristics of the Study Population

One hundred and forty-seven participants, of whom 66% were women, completed both entry and post-treatment questionnaires. Sixteen percent were referred formally by local general practitioners (GPs) and the remainder were self-referred following word of mouth recommendation by friends or health care professionals. Their characteristics are summarized in Table 1, where it can be seen that anxiety, depression and psychological stress were the most common reasons for the participants attending The Centre. Although 41 participants (28%) failed to disclose the duration of their condition, 50% of the total study population had a duration of illness extending beyond 1 year, of which 23 (16%) had suffered for more than 5 years.

Most subjects had received medical or related treatments, and of those who had been prescribed medication 11% named an antidepressant, with fluoxetine being most common. Responses did not distinguish reliably between current and former use of medication. Twelve percent had used a combination of medication and counselling/psychotherapy. Fifty-seven percent had previous experience of a complementary therapy, of which massage and aromatherapy were most common. Nineteen percent of participants reported comorbid conditions, which included asthma, headache, skin disorders, gastrointestinal disorders, high blood pressure, musculoskeletal pain, throat problems, exhaustion and extreme tension. Data relating specifically to these are not presented in this paper.

Outcomes

Symptom Scores Improved by Healing

Pre- and post-treatment scores are summarized as median (interquartile ranges) in Table 2, which shows changes that were highly significant statistically (all $P < 0.0004$) towards improvement during the study period. Before treatment, stress was the most severe symptom, with a median score of 8, which fell to 4 after treatment. Median scores for panic, fear, anger and pain were moderate before treatment and fell by 2–3 points. Sleep scores improved only a little but the change was consistent. The ability of participants to relax and to cope showed improvements of 4 and 3 points, respectively. Median general health improved by 24 points.

Most Severe Symptoms Showed Greatest Improvement

Table 3 shows the results of a separate analysis in which participants were subdivided according to severity of stress, pain, panic, fear, anger, sleep disturbance and coping ability at the time of entry. Following treatment, the most substantial improvement was seen in those with scores indicating the greatest severity at entry, in all symptom categories, with severe stress, panic, fear, anger and inability

Table 2. Median scores on entry and change (all improvements) following four healing sessions (interquartile ranges in parentheses)

Symptom	Number [#]	Entry median	Post-treatment median	Improvement	<i>P</i> *
Stress	139	8 (6–9)	4 (3–6)	4	0.0004
Panic	131	5 (3–8)	2 (1–2)	3	0.0004
Fear	130	6 (4–8)	3 (2–4.5)	3	0.0004
Anger	130	5 (3–7)	2.5 (1–4)	2.5	0.0004
Pain	128	4 (1–7)	2 (1–4)	2	0.0004
Sleep disturbances	138	7 (5–8)	6 (5–7)	1	0.0004
Relaxation	142	4 (2–7)	8 (6–9)	4	0.0004
Coping	139	5 (3–6)	8 (7–9)	3	0.0004
Health score	134	51 (40–70)	75 (60–83)	24	0.0004

[#]The numbers are less than 147 because some participants did not complete all sections of the questionnaire.

*Wilcoxon matched pairs, signed ranks test for paired data.

Table 3. Median change following four healing sessions for participants with mild, moderate and severe entry levels of stress, pain, sleep disturbances and coping ability (interquartile ranges in parentheses)

Symptom	Number	Entry median	Post-treatment median	Improvement	<i>P</i> *
Stress					
Mild	17	4 (1–4)	3 (1–4)	1	0.339
Moderate	52	6 (5–7)	3 (2–5)	3	0.0004
Severe	70	9 (8–10)	4.5 (3–6)	4.5	0.0004
Pain					
Mild	74	1 (1–3)	1 (1–2)	0	0.062
Moderate	22	6 (5–7)	4.5 (1–6)	1.5	0.006
Severe	32	8 (8–10)	5 (3–7)	3	0.0004
Panic					
Mild	44	2 (1–3)	1.5 (1–3)	0.5	0.407
Moderate	36	5 (5–6)	2 (2–3)	3	0.0004
Severe	51	9 (8–10)	4 (2–5)	5	0.0004
Fear					
Mild	32	2 (1–2.5)	2 (1–3)	0	0.951
Moderate	37	5 (4–6)	3 (2–4)	2	0.0004
Severe	60	8 (7–10)	3.5 (2–6)	4.5	0.0004
Anger					
Mild	45	2 (1–3)	2 (1–3)	0	0.746
Moderate	39	5 (4–6)	3 (2–4)	2	0.0004
Severe	46	8 (7–10)	3 (2–5)	5	0.0004
Sleep disturbances					
Too much	19	2 (1–3)	5 (3–6)	3	0.0004
Sleep well	60	6 (5–7)	5 (5–7)	1	0.106
Sleep little	59	9 (8–10)	7 (5–8)	2	0.0004
Coping					
Not coping	67	3 (1–4)	8 (6–9)	5	0.0004
Moderate coping	61	6 (5–7)	8 (7–9)	2	0.0004
Coping	11	9 (8–10)	9 (8–10)	0	0.862

*Wilcoxon matched pairs, signed ranks test for paired data.

to cope showing the greatest improvement ($P < 0.004$). There were no statistically significant changes in those symptoms with mild entry scores (Table 3). Median expectations of treatment did not exceed 6 ('see what happens') for any group, regardless of the severity of symptoms at the time of entry.

Severity of Quality of Life Impairments is Reduced by Healing

The Fig. 1 shows the number of participants responding in each EuroQoL (EQ-5D) questionnaire category before and after treatment. Anxiety and/or depression showed the most substantial improvements following treatment, with the number of participants reporting no problems increasing from 3 to 42, and the number of participants experiencing severe problems fell from 58 to 14. By contrast those reporting moderate problems increased from 75 to 80 but this was because some downgraded from the severe to moderate rating. Changes in anxiety/depression, pain and ability to carry out usual activities all proved highly statistically significant ($P < 0.0004$) when paired entry and post-treatment scores were compared for all individuals. The most impressive improvement in pain rating was shown by the number of participants reporting severe pain falling from 25 to 11. Improvements in ability to carry out usual activities after treatment are indicative of a substantial resumption of functioning by many participants. It is of interest that there was also statistically significant improvement ($P = 0.001$) in self caring ability, even though most participants also reported no problems before treatment.

Ancillary Observations

There were no reports of adverse effects of the healing sessions. Of those taking medication at the time of entry ($n = 73$), 16% ceased taking their medication, 37% reduced, 40% maintained and 7% increased their usage of medication. Visual inspection of responses relating to 'prior expectations of outcome' (median 6; interquartile range 5–8, 'see what happens') and 'previous experiences of complementary therapies' revealed no indication of relationship to outcome measures and no statistical analysis was attempted.

Discussion

Main Findings

This evaluation demonstrates that healing by gentle touch, when used alone or in addition to any conventional medical treatment, is a safe and effective method of improving psychological well-being in people with psychological problems of the varieties encountered at The Centre. Although the treatment is referred to as 'healing by gentle touch', the relative contributions to benefit provided by the touch *per se*, the attentive presence of the healer and the pleasant, caring ambience of The Centre cannot be discerned and they may

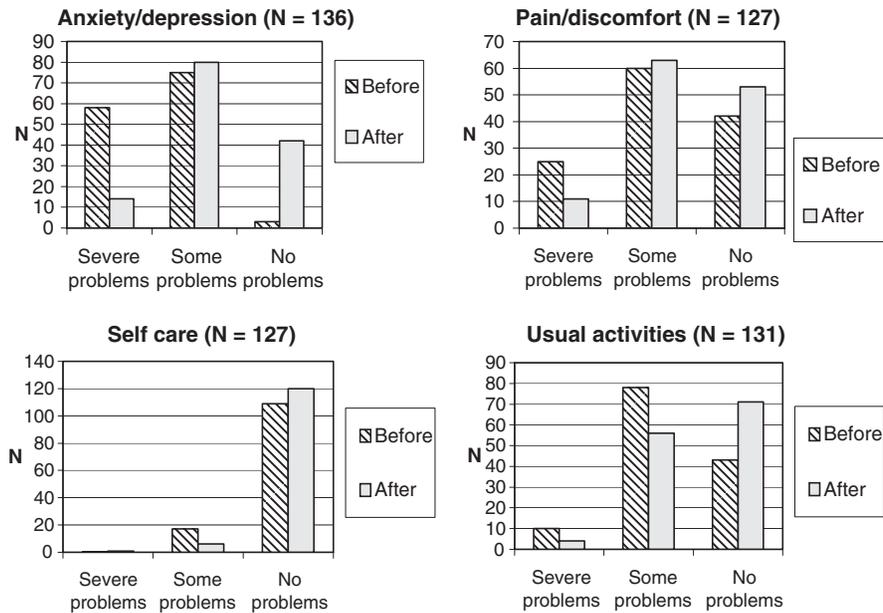


Figure 1. The number of participants with Mental Health Disorders responding in each EuroQoL (EQ-5D) questionnaire category. Numbers of participants (N) with 'severe problems' decreased and numbers of participants with 'no problems' increased after healing, while changes in the numbers of participants with 'some problems' represents the balance between numbers moving in from the 'severe' category or out into the 'no problems' group. For anxiety/depression and pain/discomfort the numbers of participants with 'some problems' increased because the numbers changing from 'severe' to 'some' problems exceeded the numbers moving from 'some' to 'no' problems. Statistical significance of post-treatment changes, using Wilcoxon matched pairs, signed ranks test for paired data: anxiety/depression, $P < 0.0004$; pain/discomfort, $P < 0.0004$; self-care, $P < 0.001$; usual activities, $P < 0.0004$.

well synergize. The substantial post-treatment reductions in subjective ratings of the predominant symptoms of the majority of participants (stress, anxiety and depression) in this study are consistent with the findings of the earlier analysis made by the local Health Authority (41), and with the findings of research on similar treatment modalities involving touch (32–34).

The recorded improvements in sleep patterns (particularly in the subgroup with severe problems) are highly relevant since depression and anxiety in particular are characterized by sleep disturbance (45). Improved sleep is likely to have had a profound effect on other dimensions with consequent increases in energy which probably improved their ability to cope, and this in turn enhancing self-esteem, thereby further reducing stress and increasing the ability to relax.

Furthermore, the fact that substantial benefits were recorded by a population of participants, at least 50% of which had experienced their symptoms for more than a year, is strongly indicative of the ability of healing by gentle touch to engender changes in refractory or chronic ill health. Demonstration of the greatest benefit in participants with the most severe symptoms is also of considerable interest, particularly as evidence against a simple placebo effect as discussed below.

Strengths and Limitations

This study resembles Phase 2 clinical trials in that it was open in design. The utilization of health-related quality of life

measures has provided a more comprehensive picture than would have been supplied by depression/anxiety measures alone, and has enabled participants to indicate the factors of most importance to them. No concurrent controls were used so, although there was clearly a strong association between participants experiencing the healing sessions and improvement in their reported symptoms, causality regarding the apparent beneficial effects of healing by gentle touch cannot be established definitively. Furthermore, the episodic, remitting and recurring nature of depressive disorders and their characteristic acute response to treatment (21) also limits interpretation.

Nevertheless, strong circumstantial evidence of benefit is provided by the findings that a high proportion of people with an illness duration exceeding 1 year reported substantial benefits after only four healing sessions over 4–6 weeks, and those with the most severe symptoms at the time of entry showed the greatest improvements. Interestingly, in placebo controlled trials of antidepressants, participants with mild depression typically showed higher responses to placebo than those with severe symptoms (46). Although the present study was not placebo controlled, the lack of statistically significant changes following treatment in participants reporting mild stress, pain, panic, fear, anger, sleep disturbances and coping difficulties is contrary to those observations. Therefore, the improvements recorded in the present study can be differentiated from placebo responses.

Moreover, prior expectation of treatment effect was not particularly high (median score 6—'see what happens'), a

finding that is consistent with findings for other subgroups of clients of The Centre (23,24,40), which indicates that outcomes were not greatly influenced by anticipation of benefit. This finding is encouraging, since if anticipation was central to the mechanism of action, healing would, theoretically, not be applicable to depression, because hopelessness and low expectations of treatment effect are common features of the disorder (11,12).

Chronic depression is more resistant to treatment than acute illness, is less responsive to single therapies (47) and placebo (48) and is less likely to remit spontaneously (13). The number of participants with chronic illness of various types yet showing improvement in the present study is, therefore, noteworthy, as is the reduction in medicines usage by more than half the participants during the study period because these ancillary observations reinforce the improvements discerned from the VASs and EuroQol data.

Possible Contribution of the Relaxation Response to Healing

The mechanism of action of healing remains to be elucidated fully. It is, nevertheless, conceivable that the intensely caring nature of treatment, engendering a relaxation response (49), could effectively facilitate processes responsible for initiating recovery, possibly by reversing the hypothalamo–pituitary–adrenal (HPA) hyperarousal processes involved in depression (50,51). Reid and Stewart (52) have proposed interactions between stress and the neurobiology of depression involving alterations in the plasticity of neural networks, which results in cognitive and emotional disturbances and, in some cases, neural damage and neuroanatomical change.

Depression is frequently characterized by abnormal regulation of glucocorticoids, which are released during stress and strongly influence processes in the hippocampus (52,53). Although the extent to which stress is linked to depression appears to differ greatly between individuals and is currently under debate (4), the physiological outcomes of stress reduction are clearly important in mental health (3,51).

Considerations of Diagnoses and the Study Population

It is both a strength and a weakness of the study that the diagnostic distinction between various categories of psychological problems cannot be drawn more precisely, nor can the participants' data be analyzed in discrete subgroups: a weakness because it does not align with prevailing medical models but a strength because healing from the holistic perspective has been shown to be effective in people with a range of diagnostic labels, providing evidence that it can be used without need to establish a definitive diagnosis in a clinical area where clear distinctions are rare.

Nevertheless, the comprehensive nature of the standard questionnaire from which the data for this paper have been drawn was valuable because several participants reported improvements in the problems they had been experiencing in various physical dimensions, including musculoskeletal pain

associated with tension, headache, skin and gastrointestinal disorders and exhaustion. These improvements in somatic comorbidities indicate that benefits of healing by gentle touch extend beyond the temporary psychological 'boost' which may accompany relaxation. The contention that physical changes also occur during healing is supported by the biochemical and autonomic nervous system changes following treatment with Reiki reported respectively by Wardell and Engebretson (35) and Mackay *et al.* (54). Other relaxation response-based interventions have also shown physiological benefits (55).

A further strength of the study relates to the client population from which the research participants were drawn. Zollman and Vickers (56) found that complementary medicine users were typically highly educated with favorable socioeconomic backgrounds. In contrast, the participants recruited to the present study were typical of local West Cumbrian people, many of whom are economically disadvantaged. The diversity of the research participants in this respect increases the generalizability of the findings.

Clinical Implications

The present findings provide strong evidence that a short series of healing sessions is associated with significant improvements in a wide range of parameters of psychological well-being. Notwithstanding the desirability of further randomized, controlled studies, the quality of evidence presented above is equivalent to or better than that which currently underpins a number of conventional and complementary therapies. There is, therefore, a strong case for carefully monitored, funded referrals of patients with significant psychological health deficits for healing as an adjunct to conventional treatments. While the mechanism of action of 'healing' remains to be established, it seems appropriately cautious to restrict such referrals to centers that can provide evidence of the safety and effectiveness of their interventions.

The evidence presented in this report indicates that healing is likely to be helpful in treating people with anxiety or depression and/or 'psychological stress'. It might be of particular benefit for people with chronic illness who are unwilling or unable to take long-term pharmacotherapy, for those for whom pharmacotherapy has yielded inadequate benefit or undesirable side-effects, and for those with comorbid conditions in which antidepressants are contra-indicated. It could be particularly useful as adjunctive therapy during the slow onset of clinical benefit of antidepressants, when easing of symptoms could enhance patients' adherence to their treatment(s).

Furthermore, as symptoms decrease in severity and cognitive and physical functioning recover, synergistic effects of healing with other treatments are conceivable, particularly with psychotherapeutic modalities, which frequently require active participation. The manifold dysfunctions and remit–relapse tendencies associated with depressive disorders (57) commonly require multiple treatment approaches. Future

treatment strategies could be based on a combination of pharmacotherapy to address neurobiological aspects, psychological therapies to modify maladaptive thought processes (58) and healing by gentle touch, to enhance both aspects by promoting well-being and stress reduction.

Conclusions

Healing has been demonstrated to be associated with safe and effective alleviation of some of the major symptoms associated with a number of mental health disorders and has contributed to a considerable decrease in the morbidity of the participants in this study. The treatment complements current approaches to the management of mental health disorders and is acceptable to clients. The absence of adverse effects makes this form of treatment particularly suitable for people with chronic disorders who may have experienced problems with pharmacotherapy. Due to the remitting and relapsing nature of some of the mental health disorders, a prospective, controlled, long-term trial is essential to determine whether or not improvements are sustainable.

Acknowledgement

Funding from North Cumbria Health Authority and Cumbria County Council Social Services (Joint Finance) is gratefully acknowledged.

References

- Craig TKJ, Boardman AP. ABC of mental health: common mental health problems in primary care (Clinical review). *Br Med J* 1997;314:1609.
- Soloman DA, Keller MB, Leon AC, Mueller TI, Shea MT, Warshaw M, et al. Recovery from major depression: a 10-year prospective follow-up across multiple episodes. *Arch Gen Psychiatry* 1997;54:10001–6.
- Herbert J. Fortnightly review: stress, the brain and mental illness. *Br Med J* 1997;315:530–5.
- Cowen PJ. Cortisol, serotonin and depression: all stressed out? *Br J Psychiatry* 2002;180:99–100.
- van der Klink JLL, Blonk RWB, Schene AH, van Dijk FJH. The benefits of interventions for work-related stress. *Am J Public Health* 2001;91:270–6.
- Dunn RL, Donoghue JM, Ozminski RJ, Stephenson D, Hylan TR. Longitudinal patterns of antidepressant prescribing in primary care in the UK: comparison with treatment guidelines. *J Psychopharmacol* 1999;13:136–43.
- Lawlor DA, Hopker SW. The effectiveness of exercise as an intervention in the management of depression: systematic review and meta-regression analysis of randomised controlled trials. *Br Med J* 2001;322:763.
- Pampallona S, Bollini P, Tibaldi G, Kupelnick B, Munizza C. Patient adherence in the treatment of depression. *Br J Psychiatry* 2002;180:104–9.
- Pathare SR, Paton C. ABC of mental health: psychotropic drug treatment. *Br Med J* 1997;315:661–4.
- Martin RM, Hilton SR, Kerry SM, Richards NM. General practitioners' perceptions of the tolerability of antidepressant drugs: a comparison of selective serotonin reuptake inhibitors and tricyclic antidepressants. *Br Med J* 1997;314:646–51.
- Beck AT. Cognitive therapy: A 30-year retrospective. *Am Psychol* 1991;46:368–75.
- DiMatteo MR, Lepper HS, Croghan TW. Depression is a risk factor for noncompliance with medical treatment: meta-analysis of the effects of anxiety and depression on patient adherence. *Arch Intern Med* 2000;160:2101–7.
- Keller MB, Lavori PW, Mueller TI, Endicott J, Coryell W, Hirschfeld RMA, et al. Time to recovery, chronicity, and levels of psychopathology in major depression: A 5-year prospective follow-up of 431 subjects. *Arch Gen Psychiatry* 1992;49:809–16.
- Hirschfeld RMA, Schatzberg AF. Long-term management of depression. *Am J Med* 1994;97 (Suppl 6A): 33S–8S.
- Hirschfeld RMA. Clinical importance of long-term antidepressant treatment. *Br J Psychiatry* 2001;179 (Suppl 42): 4S–8S.
- Hagerty BM, Williams AR. The effects of sense of belonging, social support, conflict and loneliness on depression. *Nurs Res* 1999;48:215–9.
- Malt UF, Robak OH, Madsbu H-P, Bakke O, Loeb M. The Norwegian naturalistic treatment study of depression in general practice (NORDEP)—I: randomised double blind study. *Br Med J* 1999;318: 1180–4.
- Hollon S, De Rubeis RJ, Evans M, Wiemer MJ, Garvey MJ, Grove WM, et al. Cognitive therapy and pharmacotherapy for depression: singly and in combination. *Arch Gen Psychiatry* 1992;49:774–81.
- Evans MD, Hollon SD, DeRubeis RJ, Piasecki JM, Grove WM, Garvey MJ, et al. Differential relapse following cognitive therapy and pharmacotherapy for depression. *Arch Gen Psychiatry* 1992;49:802–8.
- Shea MT, Elkin I, Imber SD, Sotsky SM, Watkins JT, Collins JF, et al. Course of depressive symptoms over follow-up. Findings from the National Institute of Mental Health Treatment of Depression Collaborative Research Program. *Arch Gen Psychiatry* 1992;49:782–7.
- Andrews G. Should depression be managed as a chronic disease? *Br Med J* 2001;322:419–21.
- MacManaway B, Turcan J. *Healing: The Energy that Can Restore Health*. Wellingborough, Northamptonshire, UK: Thorsons Publishers Ltd, 37–43.
- Weze C, Leathard HL, Stevens G. Evaluation of healing by gentle touch for the treatment of musculoskeletal disorders. *Am J Public Health* 2004;94:50–2.
- Weze C, Leathard HL, Grange J, Tiplady P, Stevens G. Evaluation of healing by gentle touch in thirty-five clients with cancer. *Eur J Oncol Nurs* 2004;8:40–9.
- Weze C, Leathard HL, Grange J, Tiplady P, Stevens G. Evaluation of healing by gentle touch. *Public Health* 2004;119:3–10.
- Unutzer J, Klap R, Sturm R, Young AS, Marmon T, Shatkin J, et al. Mental disorders and the use of alternative medicine: results from a national survey. *Am J Psychiatry* 2000;157:1851–7.
- Gallagher SM, Allen JJB, Hitt SK, Schnyer RN, Manber R. Six-month depression relapse rates among women treated with acupuncture. *Complement Ther Med* 2001;9:216–8.
- Kessler RC, Soukup J, Davis RB, Foster DF, Wilkey SA, Van Rompay MI, et al. The use of complementary and alternative therapies to treat anxiety and depression in the United States. *Am J Psychiatry* 2001;158:289–94.
- Collinge W, Wentworth R, Sabo S. Integrating complementary therapies into community mental health practice: an exploration. *J Alternat Complement Med* 2005;11:569–74.
- Ernst E, Barnes J. Methodological approaches to investigating the safety of complementary medicine. *Complement Ther Med* 1998;6: 115–21.
- Nahin RL. Research into complementary and alternative medicine: problems and potential. *Br Med J* 2001;322:161–4.
- Gagne D, Toye RC. The effects of therapeutic touch and relaxation therapy in reducing anxiety. *Arch Psychiatr Nurs* 1994;8:184–9.
- Turner JG. The effect of therapeutic touch on pain and anxiety in burn patients. *J Adv Nurs* 1998;28:10–20.
- Engle VF, Graney MJ. Biobehavioural effects of therapeutic touch. *J Nurs Sch* 2000;32:287–93.
- Wardell DW, Engebretson J. Biological correlates of Reiki TouchSM healing. *J Adv Nurs* 2001;33:439–45.
- Russinova Z, Wewiorski NJ. Use of alternative health care practices by persons with serious mental illness: perceived Benefits. *Am J Public Health* 2002;92:1600–3.
- Luff D, Thomas KJ. Models of complementary therapy provision in primary care. Final report to the Department of Health. Medical Care Research Unit, ScHARR, University of Sheffield, 1999, 4, 10, 79–83.
- Weze C. Evaluation of healing by gentle touch for the treatment of musculoskeletal disorders at the Centre for Complementary Care. MSc Research Dissertation, St Martin's College, Lancaster University.
- Dixon M. Does 'healing' benefit patients with chronic symptoms? A quasi-randomized trial in general practice. *J R Soc Med* 1998;91:183–8.
- Weze C, Leathard HL, Stevens G. Healing by gentle touch in musculoskeletal disorders. *Spirituality Int* 2005;6:200–211.
- Tiplady P. Healing assessed by NHS. *Chrism* 1996;33:9–11.
- Dorman PJ, Slattery J, Farrell B, Dennis MS, Sandercock PA. A randomised comparison of the EuroQoL and Short Form-36 after stroke. *Br Med J* 1997;315:461.

43. Hurst NP, Jobanputra P, Hunter M, Lambert M, Lochhead A, Brown H. Validity of EuroQoL a generic health status instrument in patients with rheumatoid arthritis. *Br J Rheumatol* 1994;33:655–62.
44. Van Agt H, Essink-Bot M-L, Krabbe P, Bonsel G. Test-retest reliability of health state valuations collected with the EuroQoL questionnaire. *Soc Sci Med* 1994;39:1537–44.
45. Hale AS. ABC of mental health: depression. *Br Med J* 1997;315:43–6.
46. Hollon SD, Thase ME, Markowitz JC. Treatment and prevention of depression. *Psychol Sci Public Interest* 2002;3:39–77.
47. Scott J. Treatment of chronic depression. *N Engl J Med* 2000;342:1518–20.
48. Koesis JH, Frances AJ, Voss C, Mann JJ, Mason BJ, Sweeney J. Imipramine treatment for chronic depression. *Arch Gen Psychiatry* 1988;45:253–7.
49. Benson H. The relaxation response: its subjective and objective historical precedents and physiology. *Trends Neurosci* 1983;6:281–4.
50. O'Brien JT. The 'glucocorticoid cascade' hypothesis in man: prolonged stress may cause permanent brain damage. *Br J Psychiatry* 1997;170:199–201.
51. O'Keane V. Evolving model of depression as an expression of multiple interacting risk factors. *Br J Psychiatry* 2000;177:482–3.
52. Reid IC, Stewart CA. How antidepressants work: new perspectives on the pathophysiology of depressive disorder. *Br J Psychiatry* 2001;178:299–303.
53. Kim JJ, Yoon KS. Stress: metaplastic effects in the hippocampus. *Trends Neurosci* 1998;21:505–9.
54. Mackay N, Hansen S, McFarlane O. Autonomic nervous system changes during Reiki treatment: a preliminary study. *J Altern Complement Med* 2004;10:1077–81.
55. Irwin M, Pike J, Oxman M. Shingles immunity and health functioning in the elderly: Tai Chi Chih as a behavioural treatment. *Evid Based Complement Alternat Med* 2004;1:223–32.
56. Zollman C, Vickers A. ABC of complementary medicine. Users and practitioners of complementary medicine. *Br Med J* 1999;319:836–8.
57. Bondareff W, Alpert M, Friedhoff AJ, Richter EM, Clary CM, Bazar E. Comparison of sertraline and nortriptyline in the treatment of major depressive disorder in late life. *Am J Psychiatry* 2000;157:729–36.
58. Richardson P. ABC of mental health: psychological treatments. *Br Med J* 1997;315:733–5.

Received February 19, 2006; accepted June 28, 2006