

Aftermath of the Unexpected, Unexplained, and Abrupt Termination of Healing Touch and Extrapolation of Related Costs

Sue Peck, RN, PhD, GNP-BC, CHTP, CHt

This qualitative study reports 12 patients' experiences following the unplanned and unexpected termination of their healing touch treatments. Physically disabled, chronically ill patients requiring nursing home levels of care, who were being assisted in staying at home with agency support, had been treated one to two times weekly to monthly over a period of 3 to 4 months by a healing touch practitioner, under a pilot study. Patients had been interviewed twice during their treatments and had described positive experiences with healing touch. Midway through the study, there was an abrupt stopping of treatments without warning or explanation to either patients or researchers. Naturalistic inquiry methodology was used to explore patients' subsequent reactions and experiences. Six patients had negative experiences, including increased pain and impaired functional ability, sleep, and emotional status. Six patients continued to have positive experiences after treatments were terminated. Estimates of potential cost savings with healing touch treatment, as well as ethical implications of discontinuing beneficial treatment without warning or replacement, are discussed.

Keywords: healing touch; after-treatment effects; efficacy

INTRODUCTION

This article reports patients' experiences following unplanned and unexpected termination of healing touch treatments. The patients, practitioner, and researchers were not aware that this abrupt termination of healing touch treatments would occur. The decision made by the home care/case management agency to abruptly terminate the pilot study midway was based on cost considerations but is not the main topic of this article. The focus of this article is the description of patients' responses and experiences when healing touch treatments were unexpectedly discontinued. The findings reported here are part of a larger study of these same patients (Peck, 2007) that was originally conducted to describe the experiences of frail elders and adults with physical disabilities who had received healing touch and to evaluate the cost efficacy of such treatment.

Healing touch has been defined as an energy (biofield) therapy (Eden, 1998; Gerber, 2000; Oschman & Pert, 2000) that encompasses a group of noninvasive techniques using the hands to clear, energize, and balance the human and environmental energy fields and to restore, energize, and balance an energy field disturbance, thus facilitating the healing process (www.healingtouch.net). The healing touch practitioner works to realign the energy flow, reactivating the mind–body–spirit connection to eliminate blockages to self-healing. Healing touch may be performed with physical touch or may be conducted in the field surrounding the body, with the practitioner working 4 to 6 in. away from the skin (www.healingtouch.net).

Studies have shown the efficacy of healing touch and the similar energetic therapy, therapeutic touch, for a wide range of problems (Cook, Guerriero, & Slater, 2004; Cordes, Proffitt, & Roth, 2002; Daley, 1997; Gagne & Toye, 1994; Giasson & Bouchard, 1998; Gordon, Merenstein, D'Amico, & Hudgens, 1998; Guerriero, Slater & Cook, 2001; Heidt, 1981; Peck, 1997, 1998; Quinn, 1984; Slater, 2004; Turner, Clark, Gauthier, & Williams, 1998; Wirth, 1992). Typically these studies had planned end points that prepared participants for treatment termination, and in some studies patients could negotiate for continued treatment on their own after the study was completed. In the present study, because of a decision by the case management agency involved in caring for the patients and funding the treatments, patients in this study experienced an abrupt, unplanned termination of healing touch treatments. The response of the patients to this unplanned termination of their healing touch treatments is the subject of this qualitative investigation.

METHODS

Description of the Informant Sample and Context

The informants of the original, planned study are the same as those of the follow-up study, reported here. In this follow-up study, we report on 12 of the 14 patients living at home but requiring nursing home levels of care, who had been receiving healing touch treatments for 3 to 4 months and who were being interviewed about their ongoing experience of healing touch (termed “the larger study”), prior to the unexpected termination of their treatment. (Two of the patients interviewed for the original study were too confused to participate meaningfully in this follow-up study and were therefore not included.)

All 12 patients required nursing home levels of care and agency staff delivered care in the patients' homes. Level of care designations (as outlined by the State of Wisconsin Bureau of Quality Compliance, 2007) describe the complexity of nursing home care required by these patients. Levels of care designations ranged from Intermediate Care 2 (ICF-2), requiring the least assistance with care; to Intermediate Care 1 (ICF-1), requiring more care; to Skilled Nursing Facility (SNF) requiring the greatest amount of care.¹ In this study, 2 patients met criteria for ICF-2, 4 patients met criteria for ICF-1, and 6 patients met criteria for SNF levels of care designations. All patients lived in their own home or apartment and required substantial support and assistance; they most likely would have been in nursing homes if not for the agency's support. (See Table 1 for a description of individual patients' levels of care and demographic information.)

Patients ranged in age from 35 to 96 years. Cultural backgrounds, educational level, and religious affiliation of the patients were representative of the regional population. None of the patients had received healing touch before their involvement with the agency.

Patients had a broad range of complex chronic illnesses, with all having more than one chronic condition. The most frequently occurring medical diagnoses were diabetes, hypertension, arthritis, heart failure, and neuropathy from peripheral vascular disease. Common

TABLE 1. Demographic Data

Participant Number	Age (Years)	Gender	Level of Care	Medical Conditions	Education Level	Number of Treatments	Frequency of Treatments	Costs for 3 Months of Healing Touch Treatment
1	55	F	ICF-1	Spinal plegia	GED	12	Weekly	\$459.00
2	61	F	SNF	BKA, LBP	GED, CNA	6	Every 2 weeks	\$229.50
3	88	F	SNF	A-fib, hyperthyroidism, DM type 2, HTN, macular degeneration, CHF	Grade 11	12	Weekly	\$459.00
4	84	F	SNF	DM type 2, HTN, osteoarthritis	Grade 8	14	Twice a week, then weekly	\$535.50
5	55	F	SNF	CAD, CABG, MI, UTIs, thrombophlebitis, chronic sinusitis and bronchitis, lung CA, fibromyalgia, HTN	Grade 12	11	Weekly	\$420.75
6	96	F	ICF-1	HTN, kidney cyst, diverticulosis, cataracts, HOH, DJD, fatigue	Grade 8	6	Every 2 weeks	\$229.50
7	93	F	SNF	Chronic constipation and abdominal pain, duodenal ulcers, osteoporosis, aortic stenosis, HOH, macular degeneration, depression	College	6	Every 2 weeks	\$229.50
8	56	M	ICF-2	DM type 2, CHF, obesity, PVD	Grade 12	8	Weekly	\$306.00
9	77	F	SNF	DM type 2, neuropathy, HTN, CHF, osteoarthritis, thrombocytopenia, cardiomegaly, hyperthyroidism, TB+	No formal education	6	Weekly	\$229.50
10	85	F	ICF-1	Arthritis, hypothyroidism	Grade 6	11	Weekly	\$420.75
11	44	F	SNF	COPD, DM type 2, obesity	Grade 12	8	Weekly	\$306.00
12	37	F	ICF-1	Chronic pain, fibromyalgia, undifferentiated somatoform disorder	3 years college	7	Weekly, then every 2 weeks	\$267.75

Note. BKA = below knee amputation; LBP = low back pain; DM = diabetes mellitus; HTN = hypertension; CHF = congestive heart failure; CAD = coronary artery disease; CABG = coronary artery bypass graft; MI = myocardial infarction; UTI = urinary tract infection; HOH = hard of hearing; DJD = degenerative joint disease; PVD = peripheral vascular disease; TB = tuberculosis; CNA = certified nursing assistant.

denominators among all patients, regardless of medical diagnoses, were pain and functional disability (decreased ability or inability to independently perform activities of daily living [ADLs] and instrumental activities of daily living [IADLs]).

Services provided by a new long-term care demonstration project (hereafter called the agency) assisted patients to remain in their own homes. The healing touch treatments had been approved by the agency and were given, consistent with the literature, to improve quality of life and maintain well-being, thus assisting the patients to remain in the living setting of their choice for as long as possible. Funding to the agency was capitated by Medicaid. The agency partnered funding source and home and community based waiver programs together in a single health plan, coordinating coverage for everything from day-to-day care, clinic visits, hospital and nursing home care, and creative options to maintain health. Complementary therapies were one of the creative options covered in this plan.

Healing Touch Treatments

Patients received healing touch at different intervals, ranging from twice weekly to every 2 weeks. Eight patients had treatments on a weekly basis. One patient received treatments twice a week for 6 weeks and then went to weekly treatments. The other 3 patients received treatments once every 2 weeks. Treatment frequency was determined by the agency and was based on overall patient-care cost considerations, rather than being driven by any treatment plan designed by the healing touch practitioner. The number of treatments received by individual patients ranged from 6 to 14, with a mean of 9. The median number of treatments was 6 (Table 1).

The healing touch practitioner administering treatments was a registered nurse with 3 years of experience using healing touch. A typical visit to a patient was about 45 to 60 min in length. No one particular healing touch technique was used, however, the basic healing sequence (Wardell, 2003), chakra connection, and pain drain (Hover-Kramer, Mentgen, & Scandrett-Hibden, 1996) were the most common.

Research Questions

The research question for the original larger planned study asked patients ($N = 14$) who were undergoing healing touch to describe their experience with the therapy. Patients had received healing touch for 3 to 4 months when interviewing began and most patients had been interviewed about their experiences, including whether or not the treatments had helped, if so in what way, and whether there were any adverse effects (Peck, 2007). Many of these patients were interviewed a second time for the purpose of validating the transcription and meaning ascribed to the data by the researchers.

When treatments were terminated abruptly, new questions were developed to address these unforeseen circumstances, and these same patients (except for 2 patients who were too confused to be appropriately interviewed) were then asked: "What (if anything) changed for you after healing touch was terminated?" and "How did those changes affect you?" Patients usually led the conversation on their own without prompting.

Recruitment and Interviewing Procedure

Prior to beginning the larger study, human-subjects approval was obtained through the Institutional Review Board of the University of Wisconsin–Eau Claire. A letter explaining the study was sent to those patients whose care was managed by the agency, who were receiving healing touch. All 14 participants receiving healing touch indicated interest in

being interviewed. Participants signed an informed consent and were assigned an identification code for confidentiality and privacy.

The investigators were registered nurses with experience in caring for elders and adults with chronic illnesses and physical disabilities as well as with training in qualitative research methodology. The primary researcher was also a certified healing touch practitioner (but did not give treatments to participants in this study). The three research assistants were graduate students in advanced clinical nursing practice.

The primary researcher conducted the interviews. Informant patients were interviewed in their own homes. Each interview took approximately 1 to 1.5 hr to complete.

For the original, larger study, it was planned that the 14 patients (1 man, 13 women) receiving healing touch would be interviewed twice. The interviewers were able to complete the first set of interviews on all but three patients, prior to the unexpected halting of the healing touch treatments for all patients. Patients had no chance to adjust to the announcement or to put closure on the relationship with the practitioner. Patients were not told if or when the treatments would resume.

The decision was then made by the primary investigator to continue interviewing patients, altering the questions to explore their experiences and reactions following the treatment cessation. This naturalistic inquiry forms the basis of this report. For this second phase of the study, 12 of the 14 original patients were interviewed; as noted earlier, 2 patients were very confused at the time of the follow-up interview and their responses did not address the research questions at all, so their interviews were not analyzed.

Qualitative Data Analysis

All interviews, from both phases of the study, were tape-recorded and later transcribed. The transcribed interviews of the patients were read several times by two teams working with the primary researcher, searching for themes. The two teams confirmed that data and interpretations were grounded in informant patients' stories, not the researcher's personal construction. An audit trail, coding method, and decision-making rules were developed using the traditional guidelines for coding text data (Miles & Huberman, 1994; Tesch, 1990). No cases of disagreement were found among the researchers.

The process of Naturalistic Inquiry guided this study (Lincoln & Guba, 1985). Naturalistic Inquiry aims to uncover the foundations of certain phenomena by analysis of situations. Naturalistic Inquiry contains four successive elements: purposive sampling, inductive analysis of the data, development of grounded theory, and projection of next steps in a constantly emerging design. Because context is heavily implicated in meaning, interviews occurred in the natural setting of the informant sample. The data and interpretations were checked with informants, and then used to construct a report (Lincoln & Guba, 1985). Prolonged engagement, persistent observation, triangulation of information, peer debriefing, negative case analysis, and member checking were methods used to ensure credibility (Lincoln & Guba, 1985). As one purpose of the study was to determine cost efficacy, content analysis was also employed in data analysis (Burns & Grove, 1997).

The experience of terminating healing touch was described from the perspective of the patients rather than from a conceptual or theoretical definition (Burns & Grove, 1997). Actual words of the patients were used to define the experiences. If the patient experienced no effects, that was also included. Because of cost-efficacy purposes of this study, numbers of patients experiencing effects was also sought and reported using a content analysis approach (Burns & Grove, 1997).

A retrospective chart audit was conducted searching for changes or observations documented by staff during the course of healing touch treatments. Staff was aware of who

TABLE 2. Length of Time Healing Touch Treatment Effects Were Noted to Last by Patients

Number of Patients	Time Treatment Effects Lasted
1	2–3 hr
4	2 days
3	3 days
2	4 days
2	5–6 days

received healing touch. Charting was examined for 1 week prior to treatment through 1 month after all healing touch treatments were administered. Interviews of the healing touch practitioner and staff providing direct care to the participating patients were conducted asking for their perception of changes in the participants. Data from the chart audit and practitioner and staff interviews were used to assure credibility of the findings of the participant interviews. Data gleaned from the three triangulation methods were consistent with the participant interview data and are not reported separately.

RESULTS

Findings From the Originally Planned, Larger Study

Since the results of the originally planned, larger study of patients' experiences with healing touch is reported in a separate manuscript (Peck, 2007); they will only be summarized briefly here. All the patients in the larger study reported positive experiences while receiving healing touch. No negative experiences or side effects were reported. Positive experiences reported were grouped into themes of pain relief, and improved functional ability, sleep, and emotional well-being. The findings of the larger study were congruent with the findings of previous studies conducted with healing touch or therapeutic touch.

Based on analysis of charting and billing data, differences were found in the number of healing touch treatments that patients received before they reported experiencing changes. Four patients noted positive effects after Treatment 1. Four patients noted positive effects after Treatment 3. Two patients noted positive effects after Treatment 4. Two patients noted positive effects after Treatment 7. Three patients told the practitioner they were certain that if they could have two to three treatments per week their symptoms would be controlled.

Differences were also found in patients' reports of the length of time that the effects of a single treatment lasted, ranging from 2 hr to 6 days. Patients who noted longer lasting effects commented that at the beginning of treatments the effects lasted shorter times, but as they received further treatments the effects lasted longer after each treatment. Patients who received treatments every 2 weeks noted that the effect lasted only about 3 days (Table 2).

Patients' Responses Regarding Their Experiences After Healing Touch Was Abruptly and Unexpectedly Terminated

For this follow-up phase of the study, which is the subject of this report, interviews were completed within 2 months of treatment termination. Overall, 6 of the 12 patients noted maintenance of the positive changes gained from treatment with healing touch. However,

the other 6 patients experienced worsening of their chronic illnesses after healing touch was terminated. In response to the interview questions asked, these patients reported unmet physical, emotional, and spiritual needs, and a desire for continuance of healing touch. Three of the 6 patients experiencing deterioration had received less than 10 treatments whereas the other 3 patients had received more than 10 treatments by this point in time. Emotional distress, increased pain, impaired functional ability, poor sleep, and unwanted physiological changes are themes identified in many of the interviews. These experiences are described in detail below.

Emotional Distress

All 6 patients described an emotional component to their experience of withdrawing healing touch. One patient stated,

I can't sleep, I can't do anything . . . I just think about the stresses in my life and isolation is also there and that is hard. After the healing touch treatments I had a feeling that no one . . . could hurt me anymore . . . so I was more relaxed. Since the treatments were withdrawn I again have those feelings that used to bother me.

A second patient noted

When (treatments) were withdrawn, again I felt kind of a low-esteem. I thought they were doing so good, now why did they quit me like this? Was it something I did? So then I talked to my priest and called my brother. I was thinking there was something I had done. I do miss her (practitioner), even if I could have just one treatment it would help so much.

Increased Pain

Four of the 6 patients noted resurgence of pain within 1 week of stopping treatments. One patient needed muscle relaxants despite having never been prescribed them prior to the termination of healing touch. This was an added medication expense. One patient stopped pain medications 1 month after she started healing touch; when healing touch was terminated, her pain returned to a 6-7/10, and she had to go back on pain medications. All 4 patients felt that the increased level of pain impaired their mobility.

Patients commented on posttreatment termination increases in pain as follows:

I can't wait until healing touch starts up again. I'm looking forward to being in less pain . . . It is frustrating waiting. My body is such a mess and I end up with a lot of spasms since they stopped the healing touch.

I felt just really good when the healing touch practitioner was here. I want her back! I have told them that I want her back for my neck, my whole body, my whole being seems to need her, even if the pain is gone for only a couple of hours, it means so much relief for your body.

For the first week after they stopped healing touch I did nothing but curl up on the couch in a ball and cry because of how bad the pain was. My family was very upset and disgusted that the treatments had been withdrawn.

The healing touch practitioner had taught all who were interested to use self-techniques in between the treatments she administered. One patient commented that she still used the self-techniques but did not find them as effective as they had been in the past.

Impaired Functional Ability

One patient stayed home more because of back pain after healing touch was terminated. Before treatments, the patient could only ride for short periods of time in a car if the seat was tilted back fully but had been able to sit upright in a car during the period of time she had received healing touch treatments. Three patients experienced increased pain with walking. One patient who had required muscle relaxants and increased pain medication after the termination of healing touch began falling again after not having falls throughout the duration of the healing touch treatments. When the healing touch treatments were terminated, she noticed that her legs were tightening up again and that her arthritis pain was recurring. (This patient was the only one who pleaded convincingly to the agency to reauthorize healing touch; treatments were eventually reinstated for this patient.)

Poor Sleep

Two patients experienced changes in their sleep after healing touch was terminated. One had a solid 6 to 7 hr of sleep during treatment but less than 3 hr per night after treatments were terminated. One patient noted more frequent awakenings after healing touch was terminated than they had during treatments. Patients reported that the disruptions in sleep affected their ability to function during the day and increased their sense of fatigue.

Unwanted Physiological Function

Three patients experienced physiological changes after healing touch was terminated. One patient's blood pressure averaged 118/72 during treatments. After healing touch was terminated her blood pressure rose to an average of 140/94. Concomitantly, agency staff noted in the chart that she had decreased emotional balance and mental clarity, and she had increased back pain after healing touch was terminated. One patient called the agency repeatedly to request treatments. A third patient noted,

Another thing [healing touch] really helped with is muscle spasm. My body is such a mess and I end up with a lot of muscle spasms a lot of the time. They would put me on muscle relaxants. But with healing touch I didn't need them. The healing touch would just stop them. Since they stopped the treatments, I have a lot of muscle spasms, constantly going through them now, mostly in my back. So the healing touch really helped a lot. I am just looking forward to it starting up again.

Missing the Healing Touch Provider: The Human Factor in Healing Touch

Patients expressed missing the treatments but they also missed their relationship with the practitioner, as noted in some of their statements, above. They had come to trust the practitioner and welcome the symptom relief provided. The practitioner's positive reinforcement of their ability to cope and manage helped patients to manage their symptoms. Termination of the meaningful relationship with the practitioner was distressing.

DISCUSSION

This article details the reported consequences of abrupt termination of healing touch treatments. Six of the 12 patients noted maintenance of the positive changes gained from treatment with healing touch. In contrast, the other 6 patients experienced some degree of reversal

of their symptoms when treatments were terminated; pain worsened, functional ability declined, sleep was more disrupted, and emotional and physiological status deteriorated for these patients. Why did half of the patients experience termination positively and the other half negatively? Speculation follows about possible factors involved in differences experienced in the aftermath of treatment cessation.

Possible Factors in Experiences of Positive Versus Negative Outcomes

Of particular interest are the 6 patients who maintained positive outcomes after the termination of healing touch treatments. There is a dearth of research regarding the optimal number of healing touch treatments; hence one can only speculate about factors that enabled these 6 patients to maintain positive experiences after treatment was terminated. The number of treatments received may have been adequate to meet their needs. Using the philosophical explanatory model and language of healing touch theorists such as Janet Mentgen (personal communication, 1996), one might hypothesize that the energy field of the 6 patients may have been more stable after the number of treatments they received so that stopping treatments seemed less disruptive. It is also not known how long the patients were able to maintain their positive experiences as the interviews were concluded approximately 2 months after treatments were terminated. Peck (1997) and Wenzel (1998) noted that some patients had effects that lasted several months after a scheduled termination of therapeutic touch treatments.

Research and clinical reports indicate it may take several days to weeks for positive experiences to manifest from therapeutic touch (Daley, 1997; Krieger, 1993), especially when the energy pattern being influenced has been in existence for some time, as in chronic illness.

Owens and Ehrenrich (1991) theorized that persons with cancer have a field that is the result of energy patterns established over a period of time. In line with this theory, the energy patterns of the patients in this study may have changed with the number of treatments they received and in some, positive changes were created that were sufficient to help them feel effects whereas the patients who had negative experiences may not have had attained sufficient energy field changes to continue to feel those positive effects.

The patients in this study had chronic illnesses with symptoms and energy field changes present for months to years. Anecdotal clinical evidence from healing touch practitioners (Mentgen, 1994) indicates that an energy field pattern that took years to develop is not likely to change with only a few treatments. A longer course of treatment is needed to change persistent disruptions in the energy field before the patient will experience symptom relief, especially in the case of chronic illness (Kunz & Peper, 1985). Peck (1997, 1998) noted that elders with degenerative arthritis needed at least three to four therapeutic touch treatments before noticing a statistically and clinically significant change in pain and functional ability.

Kunz and Peper (1985) advocated that therapeutic touch should be performed over a relatively long period, covering a span of more than a few of days, possibly weeks or months, to impart the greatest effect. J. Mentgen (personal communication, 1996) purports that healing touch may not have an immediate noticeable effect; in fact, patients may not notice an effect for hours or days after the treatment has been administered. She recommends that practitioners incorporate this information when planning the number and frequency of treatments.

In addition, although healing touch may not resolve the presenting problem, associated symptoms may improve (J. Mentgen, personal communication, 1996). For example, although a patient may receive healing touch for pain, functional ability may be enhanced while pain symptomatology persists. Or the patient's pain medicine works better than it

used to—they still need the medication, but now it works more effectively, whereas before the pain medication seemed to do little or nothing (Peck, 1997, 1998).

In the clinical practice of healing touch, an important decision in planning frequency and timing of treatments is to evaluate a patient's response to healing touch and then to adjust the timing and frequency of treatments accordingly. Unfortunately, at this time, research on or prescription for timing and frequency of treatments has not been reported.

Emotional reactivity to abrupt termination of treatment may have negatively biased patients' perceptions of the efficacy of treatments. Had the patients been allowed to finish a "course" of treatment and complete closure with the practitioner, they would have likely had different experiences than they did when the treatments were suddenly terminated.

Of course, other factors outside their healing touch treatments, such as personality variables, adequacy of routine medical care, or availability of alternative support systems, may have been responsible for these differences and investigation and discussion of these factors is beyond the scope of this study.

The Economics of Prevention via Healing Touch

It is feasible that if healing touch treatment had continued, the patients in this study may have experienced other positive changes including the prevention of other health problems from occurring or progressing. However, when healing touch was terminated abruptly and without warning, half the patients had experiences that reflected deterioration of their chronic illnesses. Such deterioration puts patients at risk for other health problems and complications; treatment of an exacerbation of an illness or other complications can be costly. Would the benefits of implementing a full course of healing touch treatments outweigh the costs incurred?

Before healing touch treatments began, and after healing touch was terminated, patients complained that despite the use of pain medications they still had pain that interfered with their functional ability. Prescription pain medications are expensive. Over-the-counter analgesics are cheaper, but costs add up to \$1 to \$2 per day when multiple doses are taken. The risk of side effects and drug interactions is high in patients with chronic illnesses because of the multiple medications they take (DiPiro, Talbert, Yee, Matzke, Wells, and Posey, 2005). The side effects of narcotic medications include drowsiness, sedation, constipation, and dehydration, putting the patient at risk for falls and injuries (DiPiro et al., 2005). Drug side effects are often treated with other drugs (e.g., constipation from narcotics is often treated with a stool softener), increasing the risk of drug interactions, and in the elderly, drug interactions cause many hospitalizations (DiPiro et al., 2005). Healing touch treatment involves none of these side effects.

A qualitative finding was that, overall, patients used less analgesic medication while receiving healing touch and more narcotic analgesics after treatments were terminated (Peck, 2007). The research literature supports this finding. Silva (1996) found that patients who received healing touch used less narcotic analgesics after abdominal surgery and required fewer bowel treatments during their recovery than patients who received simulated healing touch treatments or standard postoperative care. Meehan (1991, personal communication, 1994) found that patients who received therapeutic touch used less narcotic analgesic after abdominal surgery than patients who received a simulated therapeutic touch treatment and required less frequent doses of their narcotics than those in the comparison group.

Functionally, patients in this study were dependent on others for many or all of their ADLs and IADLs, for example, shopping or home maintenance management. Local agencies paid approximately \$10 per hour for nursing assistants and supportive care workers to assist with ADLs and IADLs but always struggled to have adequate numbers of staff to provide coverage. Dependence on others for ADL and IADL tasks impacts patients'

self-esteem and emotional status, has the potential to cause disuse syndrome and further dependence, and contributes to rising health care costs (Tideiksaar, 2002). In the larger study (Peck, 2007), when some of the patients were able to increase their functional ability with healing touch, they became less dependent on others, which also decreased costs of care. When healing touch was terminated, these patients again required increased ADL and IADL assistance. These findings support the work of Gordon et al. (1998) and Peck (1998), who found that therapeutic touch decreased pain and improved functional ability in elders with arthritis.

In addition, patients who are upset with their level of pain and functional ability may make more frequent calls to health care providers to ease their anxiety and frustration. Frequent calls increase staff work load (thus impacting cost of health care) and impact the staff's ability to respond to issues of greater urgency.

Disruptions of sleep because of age-related changes, pain, and functional disability contribute to inadequate hormonal function (most reparative/restorative hormones are released during deep sleep) (Stone, Wyman, & Salisbury, 1990). Poor sleep affects patient alertness during the day and can increase the risk for falls and injuries, increasing health care costs. In the larger study, it was found that sleep patterns were improved in some patients with healing touch treatments (Peck, 2007). When patients were well rested, pain was less intense. Two of the 6 patients who deteriorated after healing touch was terminated mentioned that they were now experiencing poor sleep, which likely negatively impacted their functional ability.

Daley (1997) discussed cost efficacy of therapeutic touch in relation to wound healing. Daley compared differences exhibited by a therapeutic touch group versus a control group in two separate studies. In one study, there was a 13% reduction in services required for the therapeutic touch group compared to the control group at the midway point of the intervention period and a 56% decrease for the therapeutic touch group compared with the control group at the intervention endpoint. Similarly, in the second study there was a 58% reduction in services required for the therapeutic touch group at the midway point and a 50% decreased treatment requirement for the therapeutic touch group compared with the control group at the endpoint of the intervention period. Reduction of services translates into decreased costs of health care. The author states that if these figures are extrapolated and applied to the mean cost of caring for patients such as accident victims and surgery recipients who have dermal lacerative wounds, with consideration for the health care provider's labor time and the institution's supply and related costs, the significantly increased rate of wound healing for therapeutic touch would translate into substantial monetary savings (Daley, 1997). As a demonstration of such savings, this article concludes with a cost-benefit analysis of a hypothetical case not unlike that of the patients sampled in this study.

Cost Versus Benefit: A Hypothetical Example

By extrapolating these findings, a cost comparison might be made between the expense for healing touch treatment and the costs associated with risks that might incur in the absence of treatment.

For instance, many of the patients in this study had mobility deficits, making them prone to falls resulting in surgery. Fall risk factors such as age related physical changes, disease states, and side effects of medications contribute to fall risk (Tideiksaar, 2002). Many such factors have been found to be amenable to treatment with healing touch, although studies have not been published examining effects of healing touch to prevent falls per se.

Studies by Gordon et al (1998) and Peck (1998) found therapeutic touch (an energy therapy very similar to the basic healing sequence of healing touch; Wardell, 2003), to improve functional ability in patients with arthritis both clinically and statistically. Relief

TABLE 3. Cost Comparison Chart: Estimation of Healing Touch Versus Medical Costs for Hip Fracture

Hospitalization With Surgery After a Fall	Difference	Healing Touch (1 hr Treatment; Three Treatments Per Month for 6 Months)
Ambulance—reimbursed via Medicare; \$350 per trip × 2 (to hospital, to nursing home) \$700		\$38.25 per treatment; \$114.75 per month; \$688.50 per 6 months
Hospital submitted costs \$16,000		
Surgeon \$3,200		
Personal Physician \$1,800		
Anesthesiologist \$1,030		
Nursing home \$40,000+		
Total \$62,730+	\$62,041.50	\$688.50

of pain by healing touch (similar to findings of Cordes et al., 2002; Deiner, 2001; Gelhaart & Dail, 2000; Osterlund, 1997; Peck, 1997; Weymouth & Sandberg-Louis, 2001) is likely to improve the way patients move; they no longer guard or guard movement less, stabilizing their gait and posture. Fear of falling contributes to falls (Tideiksaar, 2002). Healing touch reduces anxiety (Ferrell-Torey & Glick, 1993; Gagne & Toye, 1994; Heidt, 1981) and could be used to decrease fear of falling. Fatigue is relieved by healing touch (Guerrero et al., 2001). If healing touch relieves pain, reduces anxiety, improves the way patients move, and reduces fatigue, one could hypothesize that healing touch holds potential to decrease the risk of falls, thereby reducing health care costs.

The monthly cost to the agency for 20 patients receiving healing touch and other complementary therapies was \$3000 to \$5000 (~\$150 to \$210 per patient per month). The agency received a capitated dollar amount monthly from Medicaid to cover all health care costs, including standard and complementary medical care. In the local community, healing touch treatments cost \$45 to \$50 per hour. The practitioner in this study was paid \$38.25 per hour, based on the customary rate paid by Medicaid/Medicare at 80% of customary charges for allopathic care. The estimated average cost per patient for healing touch treatments was \$118.58 per month, with a range of \$229.50 to \$459.00 for a 3-month period (Table 1).

For the purposes of this cost-benefit analysis, suppose a hypothetical patient similar to those in this study sustains a hip fracture after a fall. She has three comorbidities: congestive heart failure, type 2 diabetes mellitus, and hypertension. She takes lasix, digoxin, atenolol, glyburide, and lisinopril daily. The patient has insurance coverage with Medicare part A. Her healing touch costs (based on figures in this study) would be \$688.50 for 6 months (average \$114.75 per month). If she falls and breaks a hip, the estimated costs for medical treatment during this time frame are far greater (Table 3 summarizes breakdown of estimated costs).

Elements of the costs of treatment of this hypothetical fractured hip include the following: Transportation to the local emergency room via ambulance is required. Ambulance transportation averages about \$350 per trip in this community. The hospital bill includes charges of approximately \$16,000 (K. La Page, personal communication, 2003). The charges are for emergency room stabilization, surgery under spinal anesthesia and intravenous (IV) sedation, laboratory testing, X-rays, IV fluids, Foley catheter, two units of packed cells (minimum), and placement of a drain in the surgical incision. Patient-controlled analgesia is used

postoperatively, changing to oral pain medications, and her previous medications are continued. Thromboembolic hose and sequential compression devices are used. Dressings on the hip are changed daily after the first 24 hr and include a minimum of two packs of fluffs and two ABD pads each time. One additional daily dressing change is often needed because of dislodgement with activity. Bedside glucose monitoring and administration of sliding scale insulin are done several times a day. A bolster between the legs is used to maintain hip alignment. Incentive spirometry is used.

It is very typical that elders are confused when in a new place or after a surgery. If this were true for the woman in this hypothetical situation, she would require sedating medication at times. Her internal medicine doctor would be called on to manage the confusion and the underlying chronic illnesses in addition to the postoperative monitoring by the surgeon. The charges for the physician, surgeon, and anesthesiologist are not included on the hospital bill. In this community, those charges average \$1,800, \$3,200, and \$1,030, respectively.

A physical therapist evaluates the patient postoperatively and treats her twice a day. Physical therapy will be continued at the nursing home. Daily complete blood counts are done for the first 3 days and then one more time before discharge. The patient is hospitalized for the standard time of 7 days allowed by Medicare.

A social worker meets with her and her family to arrange follow-up care and physical therapy at the nursing home. She is transported to the nursing home via ambulance for 2 weeks of rehabilitation.

The amount of Medicare reimbursement that is allowed for a 7-day hospital stay is \$5,045.22 for open reduction internal fixation (ORIF) with no comorbidities and is \$7,312.58 for ORIF with comorbidities. If other problems occur, the costs are lost, because the Diagnostic Related Groups fee does not cover them; unless the person has a second insurance, then the rest of the bill is submitted there (La Page, personal communication, 2003). In this instance, there would be a loss of \$8,687.

The average length of stay in the nursing home for any diagnosis without complications is 2 weeks. The day rate for nursing care and ancillary services on a therapy/rehabilitation unit in the nursing home, including room and board and medications, is \$350 per day. There would be additional costs incurred for subcutaneous insulin and oxygen if needed as these are not covered in the base rate. In the nursing home, physical therapy is billed at \$50 per 30 min. A physical therapy evaluation is generally 60 min and two 30-min treatments are given daily for 6 days per week. The nursing home bills Medicare per day (and gets reimbursed for that amount unless Medicare challenges a cost). The total expenses of the complications of a fall that requires surgery (\$62,730+) compared with the cost of healing touch are vastly different.

The charges of \$62,730+ would pay for 6 months of treatments with healing touch for 75 patients. Based on this hypothetical example, preventing falls via healing touch would be economical compared with the costs incurred in conventional surgical and postoperative treatment.

SUMMARY

Some frail elders and adults with physical disability from chronic illnesses maintained positive experiences when healing touch was terminated abruptly and without warning, but others had negative experiences. Pain, functional ability, sleep, and emotional status worsened in half the patients when healing touch was terminated. The current health care environment emphasizes cost-effective treatment protocols, as measured by shorter hospital stays, fewer supplies used, and reduced demands on the nurses' and physicians' time. Therefore, protocols that are inexpensive and efficacious, and not time intensive, should be

considered. Healing touch and therapeutic touch have demonstrated clinical and experimental effectiveness in numerous areas (Peck, 1997; <http://www1.healingtouchinternational.org/>; www.therapeutic-touch.org). Because healing touch is a noninvasive treatment that does not require special equipment and can be administered by the nurse concurrently with standardized nursing procedures such as bathing, dressing changes, and talking with the patient, the treatment costs of healing touch are negligible or even nonexistent (Daley, 1997). As such, healing touch has the potential to reduce health care costs. When compared to other treatments (cost of hospitalization after a fall, physical therapy, medications) and the potential risks of functional disability, the cost of healing touch treatments seem comparatively minor. Healing touch has the potential to decrease health care costs in elders and adults with physical disabilities.

Moreover, discontinuing a beneficial, cost-effective treatment, without warning or replacement, has ethical implications. Midway through the interviews, the agency abruptly and without warning or explanation to either the patients or the researchers, terminated healing touch treatments from all patients. Treatments were terminated despite the fact that the goal of the larger study was to determine if patients experienced benefit from healing touch in light of competing costs for medical care.

Several ethical principles are examined that support the incorporation of healing touch into nursing care in this population. Beneficence (do good and avoid evil) (Butts & Rich, 2005) is an ethical principle supporting the incorporation of evidence-based practices with efficacy for the problem at hand. healing touch has been shown repeatedly (see notations above) to be beneficial and to have little to no negative side effects. If healing touch relieves pain and anxiety, improves function, sleep, and well-being with little to no negative side effects, the principle of beneficence is met. Nonmaleficence (doing no harm) and non-malevolence (not intending to harm) are part of the principle of beneficence (Butts & Rich, 2005). Healing touch, having little to no negative side effects, and practiced with the intention for the highest good of the person (Mentgen, 1994) meets the ethical principles well. Termination or withholding of evidence based practices may be considered negligent. Currently, complementary therapies are only minimally considered to be part of the Western health care system (National Institutes of Health, 2007). However, as evidence builds, it becomes necessary to incorporate complementary treatments, such as healing touch, into care much as new medications or other treatments would be incorporated. Termination or withholding of healing touch is ethically inappropriate and practice must be changed to incorporate this new evidence based practice.

SUGGESTIONS FOR FUTURE RESEARCH

Research is needed that incorporates time motion analysis (Wells, 2002), and supply and ancillary cost parameters to support conclusions regarding the positive benefits of healing touch in relation to costs. Research is needed to determine the appropriate timing and frequency of healing touch treatments required for patients with chronic illness. Ultimately, the course of treatment should be dictated by best-practice guidelines generated from empirical research.

NOTE

1. Patients requiring ICF-2 care have long-term illnesses or uncomplicated disabilities. Simple nursing procedures are required to maintain stability. Nursing care is provided by or under the supervision of a nurse no less skilled than a licensed practical nurse under the

direction of a registered nurse. ICF-1 includes basic physical, emotional, social, and other restorative services under periodic medical supervision. Registered nurse care is required, including assessment and monitoring of reactions to treatment and symptom management. Most ICF-1 level patients have long-term illnesses or disabilities that have reached a stable plateau but may need medical and nursing services to maintain stability. Patients who require SNF level of care require 24 hr/day licensed nursing services and skilled rehabilitation services at least 5 days/week. Registered nurses and rehabilitation staff (physical therapy, etc.) observe and record patient reactions and symptoms and supervise care (State of Wisconsin Bureau of Quality Compliance, 2007).

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Acknowledgments. The author is grateful to the University of Wisconsin–Eau Claire Office of Research and Sponsored Programs for funding for this study, to Emerald Star Wind Writer for editorial assistance, to Karen La Page, Sacred Heart Hospital, Eau Claire, WI for assistance in the financial analysis of costs related to this study, to Julie Wypyzynski, Deborah Hauser, and Ronda Thompson, graduate research assistants, for assistance with data analysis, and to the editors of *Complementary Health Practice Review*. The agency has incorporated healing touch and many other complementary therapies back into its plan of care for patients interested.

Biographical Data. Sue Peck is professor of nursing at the University of Wisconsin–Eau Claire. She teaches undergraduate and graduate nursing students (in required nursing courses) and community registered nurses about complementary therapies and implementation into practice. She practices as a nurse practitioner in gerontology and maintains a private practice with complementary therapies. Her practice over the years includes critical care, neuroscience, gerontology, and complementary therapies.

Address correspondence to: Sue Peck, Professor and Nurse Practitioner, College of Nursing & Health Sciences, University of Wisconsin–Eau Claire, 105 Garfield Avenue, PO Box 4004, Eau Claire, WI 54702-4004; e-mail: pecksd@uwec.edu.