

This material is protected by U.S. copyright law. Unauthorized reproduction or online display is prohibited. To purchase quantity reprints, e-mail reprints@ons.org. For permission to reproduce multiple copies, e-mail pubpermissions@ons.org.

Investigation of Standard Care Versus Sham Reiki Placebo Versus Actual Reiki Therapy to Enhance Comfort and Well-Being in a Chemotherapy Infusion Center

Anita Catlin, DNSc, FNP, FAAN, and Rebecca L. Taylor-Ford, RN, MSN

Patients with cancer may experience many different chemotherapy-related side effects, such as fatigue, stress, and discomfort, which can have a significant effect on comfort and well-being during and after cancer treatment (Kayl & Meyers, 2006; Miaskowski et al., 2006; Nowak, Stockler, & Byrne, 2004; Vendura, Alaimo, Borzi, Fazio, & Scavo, 2005). Increasing patient comfort and well-being during the chemotherapy process is a goal of all oncology nurses, and emphasis has been placed on the use of complementary and alternative medicine (CAM) to achieve this goal.

Many oncology programs throughout the United States have implemented Reiki therapy to enhance comfort and well-being. At the time this study was conducted, CAM had not been offered as a healing modality in the 7,000-patient-per-year infusion clinic used in this study. This study examines whether Reiki therapy has an effect on comfort and well-being in patients with cancer who are receiving outpatient chemotherapy at the infusion clinic.

The authors attempted to (a) test the effectiveness of an alternative complementary therapy in a randomized clinical trial, and (b) support the Oncology Nursing Society's (ONS') research priorities (ONS, 2005b) and agenda (ONS, 2005a) in an attempt to improve the quality of life of patients with cancer (King, 2006a, 2006b; Varricchio, 2006).

Framework

A combination of caring and comfort theories were used to formulate this study. Caring theory was developed by nursing theorist Martha Rogers, PhD, (1970). Energy work to complement patient care flourished after Rogers' writings and the use of various forms of

Purpose/Objectives: To determine whether provision of Reiki therapy during outpatient chemotherapy is associated with increased comfort and well-being.

Design: Double-blind, randomized clinical controlled trial.

Setting: Outpatient chemotherapy center.

Sample: 189 participants were randomized to actual Reiki, sham Reiki placebo, or standard care.

Methods: Patients receiving chemotherapy were randomly placed into one of three groups. Patients received either standard care, a placebo, or an actual Reiki therapy treatment. A demographic tool and pre- and post-tests were given before and after chemotherapy infusion.

Main Research Variables: Reiki therapy, sham Reiki placebo therapy, standard care, and self-reported levels of comfort and well-being pre- and postintervention.

Findings: Although Reiki therapy was statistically significant in raising the comfort and well-being of patients post-therapy, the sham Reiki placebo also was statistically significant. Patients in the standard care group did not experience changes in comfort and well-being during their infusion session.

Conclusions: The findings indicate that the presence of an RN providing one-on-one support during chemotherapy was influential in raising comfort and well-being levels, with or without an attempted healing energy field.

Implications for Nursing: An attempt by clinic nurses to provide more designated one-to-one presence and support for patients while receiving their chemotherapy infusions could increase patient comfort and well-being.

therapeutic touch to increase comfort were accepted in patient care. Swanson (1993) and Swanson and Wojner (2004), using Rogers' theories, further defined what constitutes caring by identifying nurse caring as *knowing, doing for, being with, maintaining belief, and enabling*. This model supported the addition of an alternative

healing modality to increase comfort and well-being to chemotherapy care as a method of *doing for*.

Comfort theory, as explained by Kolcaba (2001), also includes components of Rogers' energy work. Comfort is seen as relief and ease that is physical, emotional, and transcendental. Kolcaba (2001) showed how therapeutics can increase comfort through Swanson's (1993) and Swanson and Wojner's (2004) caring by *doing for* the patient. Kolcaba (2001) identified components to increasing comfort.

- Nurses should identify comfort needs that have been unmet by existing support systems.
- Nurses should plan interventions to address those needs.
- Intervening variables need to be considered in designing interventions and mutually determining appropriate intermediate and long-term outcomes.
- If comfort is enhanced, patients are then more likely to participate in health-seeking behaviors.
- When patients are able to take part in health-seeking behaviors as a result of being comforted, patients and nurses will be more satisfied with care.
- When patients are satisfied with the care in a specific institution, that institution maintains its integrity. Institutional integrity has both a normative and descriptive component.

Background

Reiki therapy is a form of energy work that has been practiced for more than 2,500 years (Engebretson & Wardell, 2002; Rand, 1998; Wardell & Engebretson, 2001; Whelan & Wishnia, 2003). Originating with Tibetan monks, it was rediscovered by the Japanese in 1868 and used as therapeutic healing touch.

In general, a trained and qualified practitioner lays his or her hands over a fully clothed individual for the purpose of conducting universal life energy through themselves into the patient for the purpose of unblocking energy centers. The blockage may be physical, spiritual, or psychological. The patient self-heals when energy is unblocked. Five spiritual principles are associated with Reiki: (a) just for today, do not worry; (b) just for today, do not anger; (c) honor your parents, teachers, and elders; (d) earn your living honestly; and (e) show gratitude to everything—to the source of creation (Whelan & Wishnia, 2003).

In 2005, the Institute of Medicine (IOM) released a report, *Use of Complementary and Alternative Medicine (CAM) by the American Public*, after two years of hearings and evidence gathering. In the report, IOM asked that research facilities conduct studies to add to the knowledge base on alternative healing.

Recognizing the importance of alternative modalities, the National Institutes of Health established the National Center for Complementary and Alternative Medicine

(NCCAM) to fund and conduct research and education on alternative healing. Public policy experts Ruggle (2005) and Miles and True (2003) provide the history of how alternative healing practices have gained approval within the federal government, but with some skepticism.

Reiki and Chemotherapy

Reiki therapy has been used in many hospitals and clinics with positive results (see Table 1). DiNucci (2005) reviewed U.S. hospitals and clinics and discovered that more than 50 had Reiki programs as a modality offered to patients.

Patients who are undergoing chemotherapy for the treatment of various types of cancers have been shown to suffer chemotherapy-related side effects such as fatigue, nausea and vomiting, pain, insomnia, dyspnea (Nowak et al., 2004), hair loss, cognitive dysfunction, alterations in sexual functioning (Kayl & Meyers, 2006), anxiety, and depression (Vendura et al., 2005). These symptoms can lead to a negative impact on quality of life.

Reiki therapy has been provided by professional Reiki therapists in medical centers to improve patient comfort and well-being levels. Demmer (2004) stated that 36% of 300 surveyed hospices offered Reiki therapy to patients with cancer. Analysis of the literature found no adverse

Table 1. Research Findings on Reiki Effectiveness

Reported Benefit	Study
Adjustment in hemoglobin level	Wetzel, 1989
Improvement in well-being in patients in nursing homes	Thomas, 2005
Improvement in well-being in patients with cancer	Chong, 2006; Kozachik et al., 2006; Olson et al., 2003; Warber, 2004
Improvement in well-being in patients who have experienced strokes	Shifflett et al., 2002
Increase in salivary immune globulin levels	Wardell & Engebretson, 2001
Increased sense of physical well-being	Mansour et al., 1998; Ring, 2009; Wittes & Dundes, 2001
Patient care comfort	Burden et al., 2005
Reduction in anxiety level	Wardell & Engebretson, 2001
Reduction in heart rate	Mackay et al., 2004
Reduction in pain	Olson & Hanson, 1997
Reduction in stress	Shore, 2004
Reduction in systolic blood pressure	Wardell & Engebretson, 2001

effects reported in any study. Most articles related to Reiki therapy are case studies or qualitative reports (So, Jiang, & Qin, 2008; Winstead-Fry & Kijek, 1999) with small sample sizes or no report of power analysis. One randomized, controlled trial (Shore, 2004) found that patients undergoing Reiki treatment have significantly less distress than placebo groups, and the effect remained one year later. Therefore, using Reiki therapy may be a safe complementary modality for patients with cancer receiving chemotherapy. However, the degree of improvement has not often been studied, and the use of Reiki by RNs for their patients has not been reported. Therefore, continuing to test Reiki therapy is important to determining effectiveness.

Although patients with a cancer diagnosis may be in a vulnerable state, researchers have strongly urged their inclusion in research studies that offer actual or future benefit to themselves or others (Berry, 2004; Townsley, Selby, & Siu, 2005). Researchers have suggested that stress-induced changes in neuroendocrine function may cause insulin resistance and hyperinsulinemia, which can interfere with cancer therapy and negatively impact prognosis (Post-White et al., 2003). Therefore, including therapies aimed at reducing stress and increasing comfort and well-being may prove to be essential in optimizing treatment programs for patients with cancer.

Methods

This was an experimental, double-blind, randomly assigned study using three groups. Figure 1 depicts the study design.

Definitions

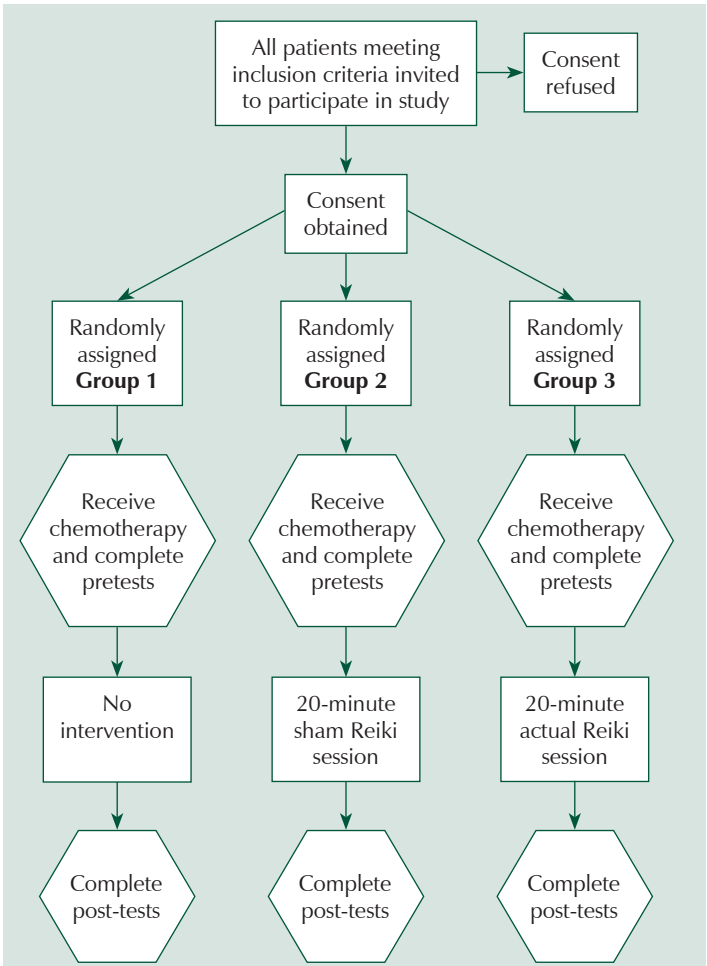
Standard care: Standard care involves the patients remaining in the chemotherapy infusion clinic for two to five hours and quietly receiving IV medications while sitting in a lounge-type chair. No other planned activities take place during the infusion, although some patients might choose to read, listen to music, or watch television.

Sham Reiki placebo: Sham means to pretend; therefore, in this study, the sham Reiki placebo provider pretended to perform a Reiki session by moving her hands on the patient's body in a specific order for a 20-minute period following strictly operationalized measures. The sham Reiki therapist was chosen in part because of her disbelief in biofield energy transfer. In an effort to prevent any possible healing energy from coming through the sham therapist, the sham therapist was asked to do math problems or create a shopping list in her head.

Reiki: The Reiki treatment was administered by a trained and experienced Reiki therapist who delivered the healing energy to the patient as is customary

in biofield therapies. The intervention lasted 20 minutes and consisted of the provider treating the patient's body, emotions, mind, and spirit by following specified hand positions on a completely clothed body to cover all seven main chakras and all major organs beginning at the head and moving down. Six major energy centers were administered to, including the crown, the brow, the throat, the heart, the solar plexus, and the sacrum. During the Reiki therapy session, the Reiki therapist managed the energy to treat "dis-ease" and improve physical, mental, emotional, and spiritual well-being (Lipinski, 2010).

Potential participants were receiving outpatient chemotherapy in an infusion clinic located in northern California. Inclusion requirements were that participants had to be aged 18 years or older and able to speak or read enough English to fill out two assessment tools, a demographic survey, and the consent form. According to the Cohen power table (Polit & Hungler, 1997), to obtain a 50% difference between groups with power of



Note. Group 1 is standard care, Group 2 is sham Reiki placebo, and Group 3 is actual Reiki (n = 63 for each group).

Figure 1. Research Design Flow Diagram for Three Groups

less than 0.05, with 80% certainty, 63 participants were needed in each of the three groups. The sample consisted of 189 patients, meeting the power requirement.

Because the chemotherapy center was very busy and small in size, arrangements were made to offer only one therapy at a time. Therefore, the days of the study rather than the patients were randomized. A random number table was used in association with the dates that the clinic was open. Randomization determined which of the three therapies would be used on that day. The infusion center nurses and the patients were blinded as to whether the sham Reiki placebo or the actual Reiki was being offered on that day and blinded to the identity of the actual Reiki therapist. The primary investigators or RN research assistants explained the study to all patients coming to the chemotherapy unit that day and asked for their consent to participate. If the patient consented, he or she was placed into the group being offered that day.

Patients in all three groups filled out a short demographic form as well as the Healing Touch Comfort Questionnaire (HTCQ) and the Well-Being Analog Scale instruments. Group 1 received standard care, Group 2 received sham Reiki placebo by an oncology-trained RN, and Group 3 was the actual experimental group receiving Reiki therapy by an oncology-trained RN who is a certified Reiki master. The participants in each group came to the chemotherapy infusion center, gave consent, filled out the three forms (demographic questionnaire, two instruments), received chemotherapy as standard care or with placebo or Reiki, and then filled out the two instruments again.

Experimental Variables

The independent variable was the provision of Reiki therapy. Alternative independent variables were the sham Reiki placebo and the usual standard care. The Reiki therapy was operationalized per methodology provided by Paule (2000). The dependent variables were the measurement of comfort (as defined by Kolcaba [2011] as an increase in physical, emotional, and transcendental well-being) and well-being (as defined by Giasson and Bouchard [1998] as a subjective feeling of physical and emotional comfort) as designated by the pre- and postintervention instruments.

Instruments

A short **demographics survey** was used to ask patient's age, gender, ethnicity, chemotherapy round, and type of cancer. Patients were told that provision of any of this data was optional.

The first instrument used was a selection from the HTCQ (Dowd, Kolcaba, & Steiner, 2006) from Kolcaba's (2011) toolkit on comfort. The complete HTCQ measures 35 items describing comfort states. The authors selected 14 questions that could be easily scored by patients

Facilities Using Reiki

Several facilities offer Reiki as an adjunct therapy for patients with cancer. The Norris Cotton Cancer Center at Dartmouth-Hitchcock Medical Center in Lebanon, NH, offers Reiki therapy to all infusion clinic patients. Norris Cotton Cancer Center was listed among the top 50 hospitals for cancer care by *U.S. News & World Report* in its 2006 "America's Best Hospitals" issue.

Other hospitals and clinics offering Reiki within cancer services include the Dana-Farber/Partners CancerCare of Boston, the Comprehensive Breast Center at Baystate Medical Center in Springfield, MA, the Hackley Hospital Cancer Center in Muskegon, MI, the Memorial Sloan-Kettering Cancer Center in New York, and the Tucson Medical Center in Arizona (DiNucci, 2005). In addition, the Cleveland Clinic has received a \$250,000 grant from the National Center for Complementary and Alternative Medicine to conduct a two-year study examining the effects of Reiki on patients with prostate cancer.

during their chemotherapy treatment. The scale ranges from 1 (strongly disagree) to 6 (strongly agree). Kolcaba's tools have been used to study the relationship of comfort and alternative medicine in patients with breast cancer receiving radiation therapy and in hospice care (Kolcaba, Dowd, Steiner, & Mitzel, 2006; Kolcaba & Fox, 1999; Kolcaba & Steiner, 2000). Kolcaba established validity for the HTCQ by creating the questions with expert practitioners in the field and items from the healing touch literature. Reliability of the HTCQ demonstrated a Cronbach alpha of 0.94 when used with 54 patients who were of multiple ethnicities (Dowd et al., 2006), and a Cronbach alpha of 0.91 when used with 58 full-time college students who were experiencing stress (Dowd, Kolcaba, Steiner, & Fashinpaur, 2007). Kolcaba provides the tool and directions for use or adaptation at www.thecomfortline.com/resources/cq.html.

The second instrument, the **Well-Being Analog Scale**, was developed by Giasson and Bouchard (1998) to assess the well-being of patients with cancer in relation to therapeutic touch treatments. On this scale, the patient places a mark between 0 and 10, which runs on a longitudinal analog. The 10 statements range from how much pain is felt to level of general well-being. Giasson and Bouchard (1998) based this instrument on the Edmonton Symptom Assessment Scale (Bruera, Kuehn, Miller, Selmsler, & MacMillan, 1991), which has been used to determine well-being in patients with cancer (Chang, Hwang, & Feuerman, 2000). The reliability and validity of the Edmonton Symptom Assessment Scale was established with coefficient correlations in test-retest at 0.86 ($p = 0.0001$) at two days. The Well-Being Analog Scale was revised several times to establish a Cronbach alpha of 0.59–0.74.

Reliability and Validity of Complementary and Alternative Therapy Studies

Two research groups, Thomas and Wilson (2005) and Warber, Gordon, Gillespie, Olson, and Assefi (2003),

have offered rigorous standards to improve methodologic quality for alternative healing studies. The standards included (a) randomization; (b) use of a control group; (c) blinding of participants and healthcare providers; (d) power computation; (e) analysis of attrition; (f) multiple methods for measuring change; (g) blinding of data collectors; (h) appropriate statistical tests; (i) selecting experienced and ability-proven practitioners; (j) exact operationalization of therapy delivery; (k) therapy delivery away from noises, distractions, and energy sources (e.g., x-ray, magnetic resonance, telemetry); (l) sham healer concentration on math problems to block any healing generation; and (m) similarity in gender, ethnicity, and appearance of the sham healer to the Reiki therapist.

Each of these standards was incorporated into the authors' research design. In addition, a criterion for choosing the sham therapist was that she closely resembled the actual Reiki therapist and she specifically did not believe in CAM practices.

To ensure validity and reliability of the intervention, the research team conducted a focus group with four certified Reiki instructors within the county where the infusion clinic is located. The Reiki instructors verified that the single session of therapy, lasting 20 minutes, should be sufficient to induce comfort and well-being. The instructors verified the hand positioning and process used in this study. Sessions were held to ensure that the actual therapist (who is certified and has been teaching Reiki since 2003) and the sham therapist approached patients in identical ways so that the placebo would most closely resemble the treatment.

Data Collection

One of the authors or an RN research assistant was located in the chemotherapy infusion center and approached each patient about the study. If the person wished to participate, informed consent was obtained. The data collector gave each participant the two instruments and the short demographic survey prior to the intervention.

Patients in Group 1 (standard care) were treated as they normally would be during an infusion visit and received chemotherapy. They were asked by the researcher to fill out the instruments again after 30 minutes.

Patients in Group 2 (sham Reiki placebo) or Group 3 (actual Reiki) were moved to a private area for treatment given by the sham or actual provider. The sham or actual Reiki was performed for a 20-minute period following strictly operationalized measures. Both providers moved their hands on the patient's body for 20 minutes in a specific manner. The sham therapist moved her hands in the designated order but did not provide any type of treatment. The sham therapist was asked to do math problems or create a shopping list in her

head to prevent any possible healing energy coming through her.

The actual Reiki intervention consisted of the provider treating the patient's body, emotion, mind, and spirit by following specified hand positions on a completely clothed body to cover all seven main chakras and all major organs beginning at the head and moving down. On completion of the sham or actual treatment, the researchers provided the same two comfort and well-being instruments for the patient's reassessment.

Data Analysis

Participants used a linear scale of 0–6 on the HTCQ and 0–10 on the Well-Being Analog Scale. When the analysis was complete, if needed, question scales were reversed so that the most comfort always scored the lowest number. The numbers were then entered into a Microsoft® Excel® spreadsheet and transferred to SAS®, version 9.1.3. Descriptive statistics were calculated for all study variables. Internal consistency estimates (Cronbach alpha) were assessed for all Likert scales, and the scores were greater than 0.8. The difference of the pre- and post-treatment scores was not normally distributed, so nonparametric analyses were used to evaluate the changes in comfort and well-being. Kruskal Wallis tests were applied. Three pair-wise contrasts (Reiki versus sham Reiki placebo, Reiki versus standard care, sham Reiki placebo versus standard care) were examined, and the outcomes were measured using 0.05 as the level of significance for six outcomes. Because of the small number of multiple comparisons and the clear median difference of the two intervention groups and standard care, the researchers did not find it necessary to apply a Bonferroni correction to the alpha level (Rothman, 1990).

The distribution of demographic category variables among the three intervention groups were analyzed using chi square and Fisher's exact tests. The level of significance was set at 0.05. The null hypothesis was that there would be no differences in pre- and post-test results for the patients receiving Reiki treatments and those receiving the sham Reiki placebo treatments or standard care, and no differences seen in the three groups.

Protection of Participants

Human subject protection was ensured. Institutional review board (IRB) approval was obtained from the authors' regional IRB. All members of the research team were RNs, and the Reiki and sham Reiki providers were experienced and certified oncology nurses. This was required by the IRB and was very fortuitous as, on two occasions, patients in the study became ill and the nurses were able to quickly identify the problem and obtain assistance. All data collection and treatments did not begin until the chemotherapy infusions were started, vital signs were stable, and the patients were comfortable.

To ensure confidentiality, the consent form, demographic survey, and instruments were coded. At the end of each day, the consents were separated from the data and filed, ensuring no patient names appeared on the responses. Data were stored in a locked cabinet in a private, locked office.

Results

Demographics

Demographic variables of the three groups showed similarity with no statistical differences. The typical participant in any of the three groups was aged 69–78 years (76%), Caucasian (82%), and undergoing their second through fifth round of chemotherapy (96%). About 25% of participants in each group had prior experience with alternative healing modalities. No statistical differences were noted on the comfort and well-being results related to the demographics.

Intervention Findings

Using the HTCQ and the Well-Being Analog Scale, two of the three groups (sham Reiki placebo and actual Reiki) did show improvement in pre- and post-comfort and well-being outcomes ($p < 0.05$). The standard care group showed no differences or improvement in well-being or comfort ($p > 0.05$). No differences were noted in the sham Reiki placebo group and the actual Reiki group. The sham Reiki placebo and the actual Reiki did have statistically significant association with increased well-being and comfort, and specifically with mental well-being and comfort (see Table 2).

After analysis of the general results, the measured components were then divided into physical and mental well-being, as well as physical and mental comfort (see Table 3). Neither the sham Reiki placebo nor the actual Reiki were influential in altering physical well-being of the patients at a statistically significant level. In the area of mental well-being, both the sham Reiki placebo and the Reiki therapy were statistically significant in raising the level of mental well-being. The standard care group did not experience a significant change in physical or mental well-being. For physical comfort, only the sham Reiki placebo group showed a significant increase in comfort. In the area of mental comfort, both the sham Reiki placebo and the actual Reiki were able to improve mental comfort at a statistically significant level. Again, the standard care group was unchanged.

Overall, the null hypotheses that no differences would be noted pre- and post-treatment for the sham Reiki placebo and the actual Reiki, and that no differences would be noted in the groups, was rejected. Both the actual Reiki and the sham Reiki placebo raised the comfort and well-being levels of the subjects. The null hypothesis that the standard care group would show

no difference in pre- and post-measurements was not rejected. The standard care group measured the same in pre- and post-tests.

Discussion

As can be seen from the rising percentage of CAM therapy used to supplement traditional Western modalities, modern healthcare consumers have taken interest in a more holistic approach to healthcare delivery (IOM, 2005). The use of alternative healing has grown exponentially since 2000. An abundance of literature shows an increase in comfort and well-being when CAM therapies are used. Reiki therapy has been cited as a complementary therapy that is easy to learn, inexpensive, noninvasive, and associated with relaxation and pain reduction (Bossi, Ott, & DeCristofaro, 2008). In the current study, the researchers evaluated whether Reiki therapy was able to increase well-being and comfort of patients receiving chemotherapy in an outpatient chemotherapy infusion clinic. The investigators were able to show that this was the case; however, the provision of the sham Reiki placebo also showed the same positive result. When patients received the standard care, increases in well-being and comfort were not noted.

The influence of the placebo effect on the participants in the sham Reiki placebo group cannot be ruled out as these participants may have felt better simply because of the attention. Lee (2004) contended that benign touch may have effects beyond placebo. To date, few studies have attempted to measure forms of energy healing against a placebo as well as standard care. The results of the current study found the placebo to be as influential as the alternative modality. Some may say that healing went through the sham provider nurse regardless, and that all nurses perform healing in their touch. The investigators, being aware of this threat, used recommended methods to minimize such a transfer of healing energy, insisting that the sham provider keep her thoughts away from healing the patient as described.

In both intervention cases (sham Reiki placebo and actual Reiki), an RN was at the bedside and in close physical contact with a patient while he or she was receiving the chemotherapy infusion. In both cases, the well-being and comfort improved at almost identical

Table 2. Pairwise Comparison of Groups

Groups	Comfort Scores (p)	Well-Being Scores (p)
Actual Reiki versus sham Reiki placebo	0.8435	0.7453
Sham Reiki placebo versus standard care	0.0027	0.005
Actual Reiki versus standard care	0.0197	0.0051

Table 3. Comparative Results and Differences in Pre- and Post-Test Scores for Three Groups

Variable	N	\bar{X} Difference	Median Scores	Comparison
Physical well-being				
Standard care	61	0.12	—	—
Sham Reiki placebo	66	0.97	1	Versus standard care
Reiki	62	1.77	1	Versus standard care
Mental well-being				
Standard care	60	2.6	1	—
Sham Reiki placebo	64	6.34	5	Versus standard care*
Reiki	63	6.88	6	Versus standard care*
Physical comfort				
Standard care	58	1.68	1	—
Sham Reiki placebo	65	3.31	3	Versus standard care*
Reiki	60	2.75	2	Versus standard care
Mental comfort				
Standard care	59	1.36	—	—
Sham Reiki placebo	63	3.95	3	Versus standard care*
Reiki	59	3.96	4	Versus standard care*

* $p < 0.05$

levels and with physical comfort improving more in the sham Reiki placebo. Therefore, the investigators of this study postulate that the intervention that improved patient comfort and well-being may have been the attentive presence of a designated nurse at the bedside. More specifically, the investigators are focused on the actual one-on-one nursing presence, rather than human presence alone, because all three groups had the presence of family members at the bedside and all groups had equal access to the regular chemotherapy unit nurses.

Limitations

The study was conducted in one medical center with a homogeneous group of clients. It is unknown whether additional sites and a more heterogeneous population would have differing results.

The study took longer than expected because many patients returned week after week for their course of therapy, and once they had consented to or declined to participate, no new patients were left to recruit. Therefore, data collection was suspended for a month after the first group was recruited to allow for a new population of patients to be approached.

Of additional relevance is a question posed in Miles and True (2003) of whether a randomized, controlled trial is the best design for testing the effectiveness of energy modalities. Miles and True (2003) suggested diverging from a randomized, controlled trial in favor of a mixed methodology in which quantitative data is used as a foundation from which more extensive qualitative data can be gathered. This approach may have been useful in the current study. Overall, the need for additional research related to energy healing, and Reiki in particular, is evident.

Recommendations for Practice

Oncology nurses want the best for every patient in their care. This study indicated that, although patients were basically comfortable and felt a sense of well-being in the chemotherapy unit, their comfort and well-being could be increased. Experiencing a one-on-one period with an RN while receiving their infusions, whether being a part of the actual Reiki or the sham Reiki placebo, was influential on the participants. Receiving that extra attention, privacy, and hands-on caring allowed participants to feel more physical and emotional comfort in addition to an enhanced sense of well-being. Vitale (2006) suggested that, in modern Western medicine, “the healing and touch practices of nursing have been on the sidelines” (p. 192), suggesting that nursing practice has

diverged from a caring and holistic approach because of modern technologic advances. Swanson (1993) identified the actual components of a nurse’s caring that included *maintaining belief, knowing, being with, doing for, and enabling*.

Despite being busy, nurses on the chemotherapy infusion unit do have time for these components. Nurses indicate *belief* that the drugs infused will have an impact. The nurse *knows* the patients who return week after week. The nurse *does for* the patient through the connection and management of the IV lines and medications and provides comfort measures whenever requested. Finally, the nurse *enables* the patient to leave the unit with a sense of completion and hope for the future. Perhaps what this current study highlights is the importance of *being with*. Swanson (1993, p. 355) described *being with* as:

Being with, being emotionally present to other, is the caring category that conveys to clients that they and their experiences matter to the nurse. Emotional presence is a way of sharing in the meanings, feelings, and lived experience of the one cared for. Being with assures clients that their reality is appreciated and that the nurse is ready and willing to be there for them. Being there includes not just the side-by-side physical presence but also the clearly conveyed message of availability and ability to endure with the other.

With both the sham Reiki placebo and actual Reiki, the current study indicates that this type of *being with* was able to increase patient comfort and well-being. As the nursing profession responds to the call for a more holistic approach to health care, researchers have suggested that nurses may consciously or intuitively incorporate

various types of energy and touch modalities into their practice (Vitale, 2008). Whether or not healing energy is transmitted to the patient, a focused nursing intervention during chemotherapy may help to create an avenue for *being with* in which nurses are able to create a caring relationship with the patient for the purposes of improving outcomes.

The authors gratefully acknowledge Maria Cho, RN, PhD, and Lucinda Hammond Garner, MS, Stats, for assistance in study design and statistical analysis. The authors also thank the nurses who assisted in the study: Nancy Kasian, RN, MSN-C, Linda Bellinger, RN, Wendy Gaus, RN, MSN, Katy Bayless, RN, and Christy Scott, RN, MSN-C. The authors acknowledge the nurses and managers

of the chemotherapy infusion center and Shaquar Akhtar, MD, for contributions to the study.

Anita Catlin, DNSc, FNP, FAAN, is a professor in the School of Nursing at Sonoma State University in Rohnert Park, CA, and is the research and redesign manager at Kaiser Santa Rosa Hospital in Santa Rosa, CA, and Rebecca L. Taylor-Ford, RN, MSN, is the manager of selected medical surgical units at Kaiser Santa Rosa Hospital. This study was funded by an ONS Foundation small research grant, supported by Genentech BioOncology, and by annual nursing research funding from the Kaiser Permanente Santa Rosa Nursing Research Program. Catlin can be reached at catlin@sonoma.edu, with copy to editor at ONFEditor@ons.org. (Submitted September 2009. Accepted for publication March 5, 2010.)

Digital Object Identifier: 10.1188/11.ONF.E212-E220

References

- Berry, S.R. (2004). For purposes of research, palliative care patients should not be considered a vulnerable population. *Clinics in Oncology*, 16, 223–224. doi: 10.1016/j.clon.2004.02.003
- Bossi, L.M., Ott, M.J., & DeCristofaro, S. (2008). Reiki as a clinical intervention in oncology nursing practice. *Clinical Journal of Oncology Nursing*, 12, 489–494. doi: 10.1188/08.CJON.489-494
- Bruera, E., Kuehn, N., Miller, M.J., Selmser, P., & MacMillan, K. (1991). The Edmonton Symptom Assessment System: A simple method for the assessment of palliative care patients. *Journal of Palliative Care*, 7, 6–9.
- Burden, B.H., Herron-Marx, S., & Clifford, C. (2005). The increasing use of Reiki as a complementary therapy in specialist palliative care. *International Journal of Palliative Nursing*, 11, 248–253.
- Chang, V.T., Hwang, S.S., & Feuerman, M. (2000). Validation of the Edmonton Symptom Assessment Scale. *Cancer*, 88, 2164–2171. doi: 10.1002/(SICI)1097-0142(20000501)88:9<2164::AID-CNCR24>3.0.CO;2-5
- Chong, O.T. (2006). An integrative approach to addressing clinical issues in complementary and alternative medicine in an outpatient oncology center. *Clinical Journal of Oncology Nursing*, 10, 83–88. doi: 10.1188/06.CJON.83-88
- Demmer, C. (2004). A survey of complementary therapy services provided by hospices. *Journal of Palliative Medicine*, 7, 510–516. doi: 10.1089/jpm.2004.7.510
- DiNucci, E.M. (2005). Energy healing: A complementary treatment for orthopaedic and other conditions. *Orthopaedic Nursing*, 24, 259–269.
- Dowd, T., Kolcaba, K., & Steiner, R. (2006). Development of the healing touch comfort questionnaire. *Holistic Nursing Practice*, 20, 122–129.
- Dowd, T., Kolcaba, K., Steiner, R., & Fashinpaur, D. (2007). Comparison of a healing touch, coaching, and a combined intervention on comfort and stress in younger college students. *Holistic Nursing Practice*, 21, 194–202.
- Engelbreton, J., & Wardell, D.W. (2002). Experience of a Reiki session. *Alternative Therapies*, 8, 48–53.
- Giasson, M., & Bouchard, L. (1998). Effect of therapeutic touch on the well-being of persons with terminal cancer. *Journal of Holistic Nursing*, 16, 383–398. doi: 10.1177/089801019801600307
- Institute of Medicine. (2005). *Use of complementary and alternative medicine (CAM) by the American public*. Retrieved from <http://www.iom.edu/CMS/3793/4829.aspx>
- Kayl, A.E., & Meyers, C.A. (2006). Side effects of chemotherapy and quality of life in ovarian and breast cancer patients. *Current Opinions in Obstetrics and Gynecology*, 18, 24–28. doi: 10.1097/01.gco.0000192996.20040.24
- King, C.R. (2006a). Advances in how clinical nurses can evaluate and improve quality of life for individuals with cancer. *Oncology Nursing Forum*, 33(1, Suppl.), 5–12. doi: 10.1188/06.ONF.S1.5-12
- King, C.R. (2006b). Introduction: Improving oncology nursing through advances in quality-of-life issues. *Oncology Nursing Forum*, 33(1, Suppl.), 3. doi: 10.1188/06.ONF.S1.3
- Kolcaba, K. (2001). Evolution of the mid-range theory of comfort for outcomes. *Nursing Outlook*, 49, 86–92. doi: 10.1067/mno.2001.110268
- Kolcaba, K. (2011). Comfort line. Retrieved from www.comfortline.com
- Kolcaba, K., Dowd, T., Steiner, R., & Mitzel, A. (2006). Efficacy of hand massage for enhancing the comfort of hospice patients. *Journal of Hospital and Palliative Nursing*, 6, 91–102. doi: 10.1097/00129191-200404000-00012
- Kolcaba, K., & Fox, C. (1999). The effects of guided imagery on comfort of women with early-stage breast cancer going through radiation therapy. *Oncology Nursing Forum*, 26, 67–71.
- Kolcaba, K., & Steiner, R. (2000). Empirical evidence for the nature of holistic comfort. *Journal of Holistic Nursing*, 18, 46–62. doi: 10.1177/089801010001800106
- Kozachik, S.L., Wyatt, G., Given C.W., & Given, B.A. (2006). Patterns of use of complementary therapies among cancer patients and their family caregivers. *Cancer Nursing*, 29, 84–94. doi: 10.1097/00002820-200603000-00002
- Lee, C.O. (2004). Biomedical, complementary, and alternative medicine: Significant issues. *Clinical Journal of Oncology Nursing*, 8, 670–674. doi: 10.1188/04.CJON.670-674
- Lipinski, K. (2010). Enhancing nursing practice with Reiki. Retrieved from www.reiki.org/healing/nursingandreiki/html
- Mackay, N., Hansen, S., & McFarlane, O. (2004). Autonomic nervous system changes during Reiki treatment: A preliminary study. *Journal of Alternative and Complementary Medicine*, 10, 1077–1081. doi: 10.1089/acm.2004.10.1077
- Mansour, A.A., Laing, G., Leis, A., Nurse, J., & Denilkewich, A. (1998). The experience of Reiki: 5 middle-aged women in the Midwest. *Alternative and Complementary Therapies*, 21–28.
- Miaskowski, C., Cooper, B.A., Paul, S.M., Dodd, M., Lee, K., Aouizerat, B.E., . . . Bank, A. (2006). Subgroups of patients with cancer with different symptom experiences and quality-of-life outcomes: A cluster analysis [Online exclusive]. *Oncology Nursing Forum*, 33, E79–E89. doi: 10.1188/06.ONF.E79-E89
- Miles, P., & True, G. (2003). Reiki—A review of a biofield therapy history, theory, practice, and research. *Alternative Therapies in Health and Medicine*, 9, 62–72.
- Nowak, A.K., Stockler, M.R., & Byrne, M.J. (2004). Assessing quality of life during chemotherapy for pleural mesothelioma: Feasibility, validity, and results using the European Organisation for Research and Treatment of Cancer Core Quality-of-Life Questionnaire and Lung Cancer Module. *Journal of Clinical Oncology*, 22, 3172–3180. doi: 10.1200/JCO.2004.09.147
- Olson, K., & Hanson, J. (1997). Using Reiki to manage pain: A preliminary report. *Cancer Prevention and Control*, 1, 108–113.
- Olson, K.H., Hanson, J., & Michaud, M.A. (2003). Phase II trial of Reiki for the management of pain in advanced cancer patients. *Journal of Pain and Symptom Management*, 26, 990–997. doi: 10.1016/S0885-3924(03)00334-8

- Oncology Nursing Society. (2005a). *ONS research agenda (2005–2009)*. Retrieved from <http://www.ons.org/research/information/documents/pdfs/ONSResAgendaFinal10-24-07.pdf>
- Oncology Nursing Society. (2005b). Year 2004 Oncology Nursing Society research priorities survey. *Oncology Nursing Forum*, 32, 281–290. doi: 10.1188/05.ONF.281-290
- Paule, L. (2000). Reiki, the alternative health therapy. Retrieved from <http://www.nyu.edu/classes/keefer/nature/Paule.html>
- Polit, D.F., & Hungler, B.P. (1997). *Nursing research: Principles and methods*. Philadelphia, PA: Lippincott Williams and Wilkins.
- Post-White, J., Kinney, M.E., Savik, K., Gau, J.B., Wilcox, C., & Lerner, I. (2003). Therapeutic massage and healing touch improve symptoms in cancer. *Integrative Cancer Therapies*, 2, 332–344. doi: 10.1177/1534735403259064
- Rand, W.L. (1998). *Reiki: The healing touch first and second degree manual*. Fort St. John, British Columbia, Canada: Vision Publications.
- Ring, M.E. (2009). Reiki and changes in pattern manifestations. *Nursing Science Quarterly*, 22, 250–258. doi: 10.1177/0894318409337014
- Rogers, M. (1970). *The theoretical basis of nursing*. Philadelphia, PA: F.A. Davis.
- Rothman, K. (1990). No adjustments are needed for multiple comparisons. *Epidemiology (Cambridge, Mass.)*, 1, 43–46. doi: 10.1097/00001648-199001000-00010
- Ruggle, M. (2005). Mainstreaming complementary therapies: New directions in health care. *Health Affairs*, 24, 980–990. doi: 10.1377/hlthaff.24.4.980
- Shifflett, S.C., Nayak, S., Bid, C., Miles, P., & Agostinelli, S. (2002). Effect of Reiki treatments on functional recovery in patients in post-stroke rehabilitation. *Journal of Alternative and Complementary Medicine*, 8, 755–756. doi: 10.1089/10755530260511766
- Shore, A.G. (2004). Long-term effects of energetic healing on symptoms of psychological depression and self-perceived stress. *Alternative Therapies in Health and Medicine*, 10, 42–48.
- So, P.S., Jiang, Y., & Qin, Y. (2008). Intervention review: Touch therapies for pain relief in adults. *Cochrane Database of Systematic Reviews*, 4, CD006535. doi: 10.1002/14651858.CD006535.pub2
- Swanson, K.M. (1993). Nursing as informed caring for the well-being of others. *IMAGE: Journal of Nursing Scholarship*, 25, 352–357. doi: 10.1111/j.1547-5069.1993.tb00271.x
- Swanson, K.M., & Wojnar, D. (2004). Optimal healing environments in nursing. *Journal of Alternative and Complementary Medicine*, 10(Suppl. 1), S43–S48. doi: 10.1089/1075553042245935
- Thomas, R., & Wilson, D. (2005). Randomized controlled trials in nonmedical and nonsurgical therapies for palliative care: Literature review. *Alternative Medicine Review*, 10, 204–215.
- Thomas, T.M. (2005, Fall). Reiki adds a new dimension to the term “quality of life” in the nursing home community. *American Journal of Recreation Therapy*, 43–48.
- Townsley, C.A., Selby, R., & Siu, L.L. (2005). Systematic review of barriers to the recruitment of older patients with cancer onto clinical trials. *Journal of Clinical Oncology*, 23, 3112–3124. doi: 10.1200/JCO.2005.00.141
- Varricchio, C.G. (2006). Measurement issues in quality-of-life assessments. *Oncology Nursing Forum*, 33(1, Suppl.), 13–21. doi: 10.1188/06.ONF.S1.13-21
- Vendura, G.S., Alaimo, S., Borzi, R., Fazio, M., & Scavo, V. (2005). Trying to listen: Needs of patients treated with chemotherapy. *Supportive and Palliative Cancer Care*, 2, 15–20.
- Vitale, A. (2006). The use of selected energy touch modalities as supportive nursing interventions: Are we there yet? *Holistic Nursing Practice*, 20(4), 191–196.
- Warber, S.L. (2004). Reiki effects on pain and quality of life in advanced cancer patients. *Focus on Alternative and Complementary Therapies*, 9, 138–140.
- Warber, S.L., Gordon, A., Gillespie, B.W., Olson, M., & Assefi, N. (2003). Standards for biofield healing research. *Alternative Therapies*, 9, A54–A64.
- Wardell, D.W., & Engebretson, J. (2001). Biological correlates of Reiki touch healing. *Journal of Advanced Nursing*, 33, 439–445. doi: 10.1046/j.1365-2648.2001.01691.x
- Wetzel, W. (1989). Reiki healing: A physiologic perspective. *Journal of Holistic Nursing*, 7, 47–54. doi: 10.1177/089801018900700109
- Whelan, K.M., & Wishnia, G.S. (2003). Reiki therapy: The benefits to a nurse/Reiki practitioner. *Holistic Nursing Practice*, 17, 209–217.
- Winstead-Fry, P., & Kijek, P. (1999). An integrative review and meta-analysis of therapeutic touch research. *Alternative Therapies in Health and Medicine*, 5(6), 58–67.
- Wittes, D., & Dundes, L. (2001). Harnessing life energy or wishful thinking: Reiki, placebo Reiki, meditation, and music. *Alternative and Complementary Therapies*, 7, 304–309. doi: 10.1089/107628001753312158