

# An Integrative Review of Reiki Touch Therapy Research

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Reiki touch therapy is a complementary biofield energy therapy that involves the use of hands to help strengthen the body's ability to heal. There is growing interest among nurses to use Reiki in patient care and as a self-care treatment, however, with little supportive empirical research and evidence to substantiate these practices. The purpose of this integrative review is to begin the systematic process of evaluating the findings of published Reiki research. Selected investigations using Reiki for effects on stress, relaxation, depression, pain, and wound healing management, among others is reviewed and summarized. A summary of Reiki studies table illustrates the study descriptions and Reiki treatment protocols specified in the investigations. Synthesis of findings for clinical practice and implications for future research are explored. **KEY WORDS:** *integrative review, nursing practice, pain management, Reiki, relaxation, research, stress* *Holist Nurs Pract* 2007;21(4):167-179

Reiki is an energy-based touch therapy that provides a means for life force energy, or Chi, to recharge, realign, and rebalance the human energy fields, creating optimal conditions needed by the body's natural healing system.<sup>1-3</sup> Reiki, similar to other touch therapies, such as therapeutic touch (TT) and healing touch (HT) involves the use of energy directed by the practitioner's hands to strengthen the body's ability to heal, inspiring balance, and involves a mind-body connection. *Reiki* is the Japanese term for universal life energy, a visible and palpable life force energy that infuses and permeates all living forms; a vibrational, pulsating universal energy.<sup>3-6</sup>

According to Engebretson and Wardell,<sup>7</sup> among others, all touch therapies share a common similarity, that is, an underpinning to Eastern ideology and philosophy. These values are consistent with the belief that the human body needs a continuous flow of life force energy for sustained health and wellness. It is also believed that health and healing involve the integration of the human and environmental energetic

fields and a mind-body-spirit connection. Energetic balance or harmony involves biopsychosocial and spiritual integration, commonly expressed as physical and spiritual healing. This concept serves as a major foundation for complementary and alternative medicine (CAM) energy work.<sup>3,5,6,8-13</sup>

## SIGNIFICANCE OF REIKI THERAPY

The National Center of Complementary and Alternative Medicine (NCCAM)<sup>14</sup> classifies TT, HT, and Reiki as biofield therapies, the medical use of subtle energy fields in and around the body for positive health effects. The NCCAM and recent US reports depict a consumer-driven interest in CAM, especially energy work therapies. The NCCAM<sup>14</sup> and Tindle et al<sup>15</sup> report that Americans spend between \$36 and \$47 million annually on CAM therapies; 36% of US adults currently utilize CAM, and 1.1% of the 31,000 participants reported they had used Reiki in the year before taking the survey conducted by the NCCAM. The CAM domains of mind-body medicine and energy work are used by consumers for relaxation, musculoskeletal conditions, pain management, anxiety, or depression.<sup>14</sup> Both Gordon<sup>16</sup> and Schiller<sup>17</sup> suggested that the awareness, use, and integration of CAM in the United States is beginning to shift from the marginal fringes to the mainstream of care.

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In response to consumer demands, there is growing interest among nurses and other healthcare providers in CAM energy work, especially touch therapies that are noninvasive and not dependent on expensive technology.<sup>18–20</sup> Miles and True<sup>21</sup> stated that the exploration of energy work by nurses is not new to nursing, dating back at least to Dolores Krieger's pioneering research with TT in the 1970s. The American Holistic Nurses Association<sup>22</sup> position statement on CAM endorses noninvasive energy work as valid nursing interventions to render holistic care for self and others. Both TT and HT originated within nursing, and nurses continue to lead TT and HT practice and investigations. The literature contains more than 30 years of TT and a growing number of HT research studies. Outcomes research associated with these modalities focus on relaxation, decreased anxiety, improved well-being, and healing.<sup>18–20,23,24</sup>

In contrast, little research on Reiki has been published to date. Reiki is an ancient energetic healing practice believed to have originated thousands of years ago in the Tibetan Sutras, and then lost, to be renewed in the 1800s by Dr Mikao Usui, a Japanese monk.<sup>3</sup> In recent years, professional nursing is a leading discipline in the exploration of the benefits of Reiki. Nurses and others report clinical observations that the use and practice of Reiki has relaxation effects, stress management benefits, lessens pain, and promotes inner healing, however, with little empirical evidence on just how it works.<sup>21,25–31</sup> Within the last 10 years, the use of Reiki has increased among nurses and others, such as physicians, and rehabilitation therapists who practice this modality in patient care in hospitals, hospice care settings, emergency departments, psychiatric settings, nursing homes, operating rooms, family practice, and many other settings.<sup>21,32</sup>

Unlike TT and HT, Reiki therapy was not developed in nursing, and there is little research to support the use of Reiki touch therapy as either a nursing intervention or a self-care practice. There are only a few published investigations on Reiki use and patient-centered outcomes and only one completed investigation on the potential Reiki benefits to the practitioner.<sup>7,12,33–36</sup> Nursing as well as nonnursing Reiki investigations have only been reported within the past 20 years, with most of the research published within the last 10 years. This research typically used quantitative methodologies, and there are no published Reiki research integrative reviews (IRs) to date. One reason for the lack of scientific evaluation of Reiki

may be that until very recently, Reiki was primarily practiced by individuals outside of mainstream healthcare.<sup>21,32</sup>

The purpose of this IR is to begin the systematic process of evaluating the findings of published Reiki research. Confusion in what constitutes credible CAM explorations and the lack of empirically based investigations is a common criticism challenging Reiki use within our Western, allopathic model of healthcare. The field of energy research does not readily lend itself to traditional scientific analysis or strictly linear research methods because paradoxical findings are common. However, an important element in reviewing this information was to include nonsignificant as well as significant findings most promising for directing future research and clinical practice.<sup>7,21,37</sup>

## METHODS

The information obtained for this Reiki research analysis was secured from published investigations in peer-reviewed journals, Reiki organizational Web sites for credible research links, the NCCAM Web site for Reiki research, books with reported research,<sup>38</sup> ancestry searching to identify key or classic articles in reference lists of secured articles, and electronic data bases, that is, MEDLINE, PubMed, and CINAHL. This review includes mixed methodology research (quantitative and qualitative), but only complete quantitative reports have been given. Mixed methodological studies were reviewed because these investigations are considered classic articles and the quantitative component of each was thoroughly described for analysis.

The following search limits were utilized: (a) English only; (b) research; (c) clinical trials—Reiki use as an intervention; (d) random assignment, either placebo or control; (e) investigations; (f) peer-reviewed journal; (g) abstracts; (h) full text; (i) the use of human participants; and (j) no delimitation of sample size. This analysis did not include (a) case studies, (b) secondary reviews, (c) published or unpublished dissertations, (d) experimental or nonexperimental articles examining or reporting Reiki use as a CAM therapy, or (e) laboratory studies utilizing the healing effects of energy work in general. Only fully described, completed studies that were available to this author were utilized, while the individual researchers chose the outcome or study

variables. Because of the limited availability of investigations, bias may have occurred during this review. Because published studies of Reiki are a recent occurrence and are few, no attempt was made to narrow to a specific issue, diagnosis, or patient population. Only 16 articles met the established review criteria; however, 2 of the 16 retrieved Reiki investigations that were published in other literature sources, that is, non-peer-reviewed journals, met all review criteria and were included in this review. The information for this IR includes all appropriate research articles published from 1980 to 2006.

### Relevant terms

The definition of Reiki touch therapy utilized in this review was the practice taught within the traditional lineage with training to levels I, II, and III or Master Reiki levels.<sup>1,2</sup> All the selected articles were consistent in their use of this definition of Reiki as an independent variable whether or not other modalities were concurrently investigated with Reiki. It is interesting to note that outcome variables are consistent with previous TT and HT investigations, for example, relaxation and stress responses. In some of the Reiki studies, placebo or “sham” Reiki, defined as Reiki hand positions mimicked and performed by someone not previously attuned and educated to any Reiki level, was performed on comparison groups. Other studies include the intervention of *distance Reiki*, which is defined as sharing Reiki energy with someone who is not physically present but envisioned as or by use of a doll to represent the person being treated.

## REVIEW OF REIKI STUDIES

These studies are categorized by study area including stress/relaxation-depression, pain, wound healing, and Reiki-placebo standardization. A brief description of the studies is provided, followed by a summary of the category as a whole. The summary of Reiki studies (Appendix) illustrates an overview of these findings. As there were treatment protocol inconsistencies among the clinical trials, a description of the specific Reiki protocols utilized in the investigations is included. The selected treatment details incorporate (a) length of treatments/sessions utilized, (b) Reiki practitioner level, and (c) hand positions that were reported.

### Stress/relaxation-depression and Reiki

Schlitz and Braud<sup>41</sup> conducted a quantitative quasi-experimental investigation with a qualitative component to assess the calming effects of distance Reiki with 15 volunteers in a clinic setting. Each participant received distance Reiki (influence sequence), followed by sequential periods of no Reiki (control sequence). Skin resistance response polygraph readings were used to determine whether or not calming effects could be detected during Reiki; however, no significant findings were reported. Only minimal Reiki distance healing information was included by the researchers (see Appendix); however, the researchers were not blinded and the randomization of participants was not utilized. On the basis of verbal extractions from unstructured participant qualitative interviews and questionnaire responses developed for the study, the researchers reported the calming themes of Reiki and suggested these would have gone unnoticed using quantitative methods only. The investigators concluded that an experimental design is not optimal for testing an individualized healing therapy such as Reiki.

Wardell and Engebretson<sup>12</sup> conducted a single-group repeated measures design study to evaluate selected biological markers for the effects of Reiki on stress reduction. A convenience sample of 23 healthy subjects was recruited with no other sampling criteria detail reported. Each participant received one 30-minute Reiki session in the research office and data were collected before, during, and immediately after the session for the following: salivary IgA, cortisol, blood pressure (BP), electromyography, and the State-Trait Anxiety Inventory (STAI). The *t* test results showed that state anxiety mean scores were lower after the Reiki session ( $M = 26.17$ ,  $SD = 6.26$ ) than before the Reiki treatment ( $M = 31.96$ ,  $SD = 9.73$ ), ( $t_{22} = 2.46$ ,  $P = .02$ ), with no prestate or poststate anxiety score distribution. A repeated measures analysis of variance (ANOVA) indicated a significant drop in systolic blood pressure (SBP) after the Reiki session ( $F_{2,44} = 6.60$ ,  $P < .01$ ). The researchers concluded that Reiki brought about stress reduction, but indicated the findings should be considered with caution because of the use of only one Reiki session, and because the Reiki was not individualized as would occur in the natural setting.

In a quasi-experimental, placebo controlled investigation, Witte and Dundes<sup>39</sup> studied the effectiveness of Reiki on physical and mental

relaxation with a convenience sample of 100 undergraduate students on a college campus. Each participant was placed in a nonrandomized group of 25 and received either a 20-minute session of a Reiki treatment, a Reiki placebo treatment, a session of listening with headphones to a meditation tape, or a session of listening by headphones to a music tape. No sampling criteria were included in the report. Relaxation level was measured by an investigator-designed questionnaire, and heart rate (HR) and BP were assessed before and after each session. No significant differences were found. The researchers reported insufficient sample size, potential error variance in pretest relaxation state, and 20-minute sessions for relaxation as study limitations.

Shiflett et al<sup>37</sup> conducted a modified, double-blind placebo controlled clinical trial to evaluate Reiki effectiveness with 50 subacute stroke rehabilitation patients using specific inclusion and exclusion criteria. Each subject was randomized to a Reiki group given by a Master Reiki, first-degree Reiki practitioner, or "sham" practitioner, and received up to 10 Reiki treatments over a 2<sup>1</sup>/<sub>2</sub>-week period with a Reiki treatment protocol. A no-treatment historic control arm consisted of patients who met the study criteria, but were not approached to be in the study. The Functional Independence Measure (FIM) was conducted on admission and the Center for Epidemiological Studies-Depression Scale (CES-D) was administered before and after all treatments. CES-D scores were analyzed using analysis of covariance with age and initial FIM score, including a post hoc analysis of the FIM and CES-D scores with nonsignificant results. The researchers reported the following may have influenced the results: (a) 4 subject study attrition; (b) missing FIM data; (c) the possibility that Reiki had a smaller effect (subtle effect) than was statically planned; and (d) the sample size was not large enough to avoid a type II error. The researchers noted that 1 Master Reiki practitioner participating in the study trained the employees who performed all of the Reiki sessions. The sham and Reiki practitioners completed questionnaires developed for the study and could not be differentiated as to whether they were sham or trained Reiki practitioners; however, these results were based on only one item: that is, feeling heat in hands, sham practitioner to Reiki practitioner ( $t = 2.44, P < .03$ ). The investigators also questioned whether sham or placebo procedures are truly inert since field theories

propose that human and environmental fields are in perpetual interaction.

Shore<sup>40</sup> conducted an experimental double-blind study with 45 participants to assess the effects of Reiki on depression and stress using specific enrollment criteria. Each participant was randomly assigned to 1 of 3 study groups and received either a Reiki treatment, distance Reiki, placebo Reiki, or distance sham Reiki for 1 to 1.5 hours per treatment for a total of 6 weeks. Distance Reiki was described as attuned Reiki practitioners who sent healing energy from another location, whereas distance mock Reiki was given by a person who mimicked the Reiki hand positions, not attuned to any degree or level of Reiki. Pretesting and posttesting was done using the Beck Depression Inventory (BDI), the Beck Hopelessness Scale (HS), and the Perceived Stress Scale (PSS). A repeated measures multivariate analysis of variance (MANOVA) demonstrated no significant group differences with the BDI, HS, or PSS at pretest. However, it showed a significant difference on the PSS scores between the hands-on Reiki and placebo group ( $P < .01, \eta^2 = 0.18$ ) and between the distance Reiki and the placebo group ( $P < .01, \eta^2 = 0.17$ ). In addition, it demonstrated a significant difference on the depression scale posttest scores between the hands-on Reiki and placebo groups (BDI,  $P = .05, \eta^2 = .09$ ; HS,  $P = .02, \eta^2 = 0.12$ ) and between distance Reiki and the placebo group (BDI,  $P = .004, \eta^2 = 0.18$ ; HS,  $P = .01, \eta^2 = 0.14$ ), however, with small effect sizes and questionable clinical significance. One year after the treatment, the researchers reported that significant differences obtained between the control and treatment groups were maintained on the BDI, HS, and PSS ( $P < .05$ ). No significant reduction in the BDI, and HS, PSS scores were found for the placebo group until they received hands-on Reiki after the study was completed, and the results were similar to the participants of the Reiki treatment group ( $P < .01$ ). Future studies should include a larger group of participants to strengthen the findings.

### Summary of stress/relaxation-depression studies and the use of Reiki

Stress and relaxation are conditions for which energy therapies are gaining acceptance among consumers and healthcare professionals alike. In these studies, 1 significant and 3 nonsignificant findings were reported. These investigations reflect a wide range of internal and external validity research issues that

affect the quality of the investigations; therefore, there is a weak state of knowledge about the use of Reiki for stress/relaxation management or depression. The investigation by Shore<sup>40</sup> indicates that Reiki might have beneficial results, however, the generalizability of the findings are limited.

## Pain

### *Acute pain and Reiki research*

Wirth et al<sup>42</sup> conducted a randomized, double-blind, crossover design study to assess the effectiveness of Reiki and another energetic healing method (LeShan healing), used in combination on iatrogenic pain after dental extraction procedures ( $M = 2.7$  weeks). The study included 28 volunteers from a dental clinic who met specific inclusion and exclusion criteria, and were randomly assigned to the treatment, Reiki and LeShan plus standard of care (SOC), or control group (SOC only) condition, with crossover assignment to the opposite group after a similar dental extraction (within 2 weeks of the first procedure). An ANOVA of the visual analog scale (VAS) and a 5-point pain relief (PAR) scale scores showed a significant difference between the treatment and control groups in both level of pain intensity and degree of pain relief for the postoperative hours 4 through 9 ( $F = 21.74$ ,  $df = 1$ ;  $P < .001$ ).

### *Chronic pain research and Reiki*

Olsen and Hanson's<sup>41</sup> work represents one of the earliest published studies assessing the effect of Reiki on pain among 20 participants with limited study criteria. Each study participant received one Reiki treatment. A 10-point VAS and a 6-point Lickert-type pain rating scale were administered before and after the Reiki treatment. A significant correlation of .88 between the VAS and Lickert pain rating scale was observed after the Reiki treatment ( $P = .0001$ ). Paired  $t$  test results showed a mean decrease in VAS scores of 2.25 and Lickert pain scores of 1.25 ( $P = .0001$ ). Future studies should include the evaluation of a placebo effect through inclusion of a control group.

An experimental study was conducted by Dressin and Singg<sup>45</sup> to examine the effects of Reiki on pain, mood, personality, and faith in God. The study participants included 120 volunteers with reported study selection criteria only. Each participant was randomly assigned to 1 of 4 groups and received Reiki, progressive muscle relaxation, sham Reiki (placebo controlled group), or no treatment (control

group) for 10-biweekly sessions. Study participants completed 12 instruments at pretest, posttest, and 3 months' follow-up intervals (see Appendix for specific scales and reported significance levels). ANOVAs showed significant results for 10 of the 12 scales and scores, and larger treatment effects on depression and state and trait anxiety (STAI). The researchers discussed the possible study limitations of extraneous or interaction effects of the placebo Reiki and the potential intervening variables of severity of illness, multiple experiments, among others.

Olsen et al<sup>44</sup> conducted an experimental study with Reiki on 24 cancer pain subjects recruited from inpatient and outpatient settings. The investigators reported that 73 subjects met all eligibility criteria, though the enrollment process was stopped after 24 subjects because of the persistent requests for Reiki from the study participants, and 20 eligible subjects refused participation. Each of the 24 participants were randomly assigned to receive standard opioid therapy + rest (rest 1.5 hours on days 1 and 4) (arm A) or standard opioid therapy and Reiki (2 Reiki sessions on days 1 and 4) (arm B). Neither the subject nor data collector was blinded to the treatment group allocation. Analgesia use, hemodynamic readings, and VAS pain scores were reported for 7 days, and the Quality of Life assessment tool was completed by the study participants on days 1 and 7. No pretest significant differences were reported using Fisher's exact test for across group characteristics. A Kruskal-Wallis analysis demonstrated change in score differences in arms A and B for significant pain improvement ( $P = .035$ ), a drop in BP ( $P = .005$ ), and pulse ( $P = .035$ ) compared with arm A on day 4. The arm B participants experienced a significant drop in pain only ( $P = .002$ ) as compared with arm A. The arm B participants had a significant improvement ( $P = .002$ ) in the psychological component of the Quality of Life from days 1 to 7 compared with arm A.

## Summary of pain studies and use of Reiki

Amid contemporary challenges for effective pain management strategies, consumers and healthcare providers alike are exploring seeking CAM energy work as a noninvasive, adjunctive measure in both acute and chronic pain trajectories. In these studies, one investigation with Reiki use and acute pain management (in combination with another energy healing modality) yielding significant findings is reported. Two investigations with nonsignificant

findings and 1 with significant findings on the effect of Reiki on chronic pain reported. Sampling criteria, as well as methods, small sample sizes, varied questionnaire usage with potential response bias, and probable interaction effects toward potential random error in nonspecific pain study conditions limit the generalizability of the findings for Reiki as an adjunctive pain strategy. The investigation by Wirth and Barrett<sup>48</sup> demonstrates a more rigorous research design with attention to protocol integrity and error variance control; however, the results cannot be attributed to Reiki use alone. Reported measurement data show a trend suggesting that Reiki has beneficial results with pain, but the overall findings did not reach statistical significance. These investigations indicate that pain as an outcome variable can be quantified and further research with Reiki use is promising.

## Biological correlate research and Reiki

### *Hematological indicators and Reiki*

Wetzel,<sup>36</sup> a nurse, conducted one of the first published Reiki investigations. This quasi-experimental study utilized a sample of 48 healthy adults with specific study exclusionary criteria and 10 healthy medical professors as a small control group. This investigation replicated Dolores Krieger's TT protocol for hemoglobin studies and TT. Subjects were placed in the experimental group and it is not reported whether the Reiki performed in this investigation was a self-treatment or performed by others. The control group did not receive any Reiki. Serum hemoglobin and hematocrit before and after the Reiki session were measured 24 hours apart. Correlated *t* tests showed a significant change in posttest hemoglobin and hematocrit levels for the experimental group ( $P = .01$ ). The investigator offered a brief discussion of the qualitative, interview component of this study, and reported that participant experiences are similar to TT qualitative reports and concluded that Reiki theory of "healing, harmonizing and balancing" is on an individual level, and has implications for nursing care.<sup>36(p51)</sup>

Wirth et al<sup>45</sup> conducted a double-blind crossover design study to assess the combined effects of Reiki, TT, LeShan healing, and QiGong therapy on common blood chemistry tests. Seventeen subjects participated in the study and specific inclusion and exclusion study criteria were not reported. All participants were randomly assigned to receive two 1-hour evaluations and 1 session of TT, Reiki, LeShan healing, and

QiQong at specific intervals for a 1-hour period (experimental group) or a nontreatment session (control). A total of 6 blood samples were drawn: prior to beginning each session (baseline) and at 30- and 60-minute intervals (time points 1 and 2). Crossover by subjects to the opposite treatment/control interventions occurred the following day after a 24-hour washout period. Wilcoxon signed rank test showed a significance for blood urea nitrogen values from baseline to time point 2 ( $P = .02$ ) and blood glucose values from baseline to time point 1 ( $P = .03$ ) and time point 2 ( $P = .001$ ). Blood chemistry distributions for both groups at baseline and all those utilized in this study were not specified in the report. Further research recommendations include a larger subject population with matched controls and the use of more serum immunocompetence measures.

Mackay et al<sup>47</sup> conducted a blinded, clinical trial design to assess autonomic nervous system function response to Reiki. Forty-five healthy volunteers from an outpatient clinic, with no specific inclusion criteria, were randomly assigned to 1 of 3 study groups and received rest plus a Reiki treatment, rest plus sham Reiki, and rest only. HR, cardiac vagal tone, diastolic and systolic blood pressure (DBP; SBP), cardiac sensitivity to baroflex, and respiratory rates were recorded for each participant at baseline, continuously during a 15-minute rest period, 30-minute treatment period (Reiki or sham Reiki), and another 10-minute rest period. Balanced ANOVA (BalANOVA) showed HR ( $P < .005$ ) and DBP ( $P = .005$ ) differed significantly between the Reiki and placebo groups.

### Summary of biological correlate studies and use of Reiki

The work by Wetzel<sup>36</sup> is considered to be a hallmark study and set the stage for subsequent physiological research with Reiki. To date, the 3 published investigations with selected biological correlates and the use of Reiki are considered preliminary in nature. It is questionable whether the outcome effects of Reiki in combination with other CAM modalities can be strictly attributed to the use of Reiki alone. The study with the use of Reiki on hemoglobin findings is not rigorous due to a lack of clarity as well as with design procedures. The investigation with selected autonomic nervous system measurements and Reiki is weak due to sampling, methodological, and statistical study flaws with questionable threats to internal validity. Quantitative studies can be strengthened by (a) use of

larger, randomized samples, (b) provision of clearer Reiki protocol details to promote treatment integrity and allow duplication, (c) minimizing extraneous variables and interaction effects by use of Reiki therapy along, and (d) attention to measurement integrity to decrease random error.<sup>36</sup>

### Wound healing and Reiki

A randomized, double-blind, within-subject crossover research study was conducted by Wirth and Barrett<sup>48</sup> to examine the effects of noncontact therapeutic touch in isolation and in combination with Reiki, LeShan healing, and intercessory prayer on the healing of full-thickness human dermal wounds. Lateral deltoid biopsies (a study procedure) were performed on 15 healthy subjects and the wounds were assessed for reepithelialization at days 5 and 10. All randomly assigned subjects met as a group for a 1-hour visualization/relaxation session, including guided imagery for healing or relaxation. Subjects were randomly assigned to receive biofeedback on certain days, noncontact therapeutic touch for 6 minutes/subject and 1-hour visualization session with guided imagery on certain days, and distance Reiki (in absentia) and then subjects crossed over and received these interventions without any distance healing on opposite days. During the subject's session with the noncontact therapeutic touch healers, LeShan healing and intercessory prayer were performed at a distance (not hands-on). The researchers did not report the treatment lengths for either groups, and no Reiki protocol detail was included in this report. The researchers reported that the control group had more fully healed wounds, and that no significant results for the experimental group were found. The researchers identified that the complicated healing protocol and potential interaction effects used in this investigation were study limitations.

### Summary of wound healing and Reiki

Only 1 nonsignificant study with Reiki was found in this category. This investigation is reflective of very early findings of Reiki use and wound healing, as this study has a complicated treatment design, a limited sample size, and there are numerous extraneous variables adding to potential random error.

### Reiki/placebo standardization and Reiki

Mansour et al<sup>49</sup> conducted a 4-round crossover experimental study to assess the effectiveness of a

placebo Reiki standardization procedure. Twenty blinded subjects received 1 of 4 interventions: Reiki plus Reiki, placebo plus placebo, Reiki plus placebo, or placebo plus Reiki, and answered self-administered, investigator-generated questionnaires. In the initial round, the researchers reported that 25% to 50% of the participants were able to correctly identify the Reiki practitioner from the placebo practitioner. By round 4, with changing Reiki and placebo Reiki personnel, none of the subjects, or 0%, correctly identified the placebo practitioner. The researchers recommended that adding placebo standardization testing procedures to future CAM research studies would contribute to more rigorous energy work study.

### Summary of Reiki/placebo standardization and Reiki

This study was included in this IR because new ground was broken with the inclusion of a placebo Reiki condition, with potential usefulness for ruling out nonspecific effects of treatment. However, since the conclusion of this investigation, there is growing debate among energy work researchers about interaction effects with placebo controls and emerging questions as to whether sham Reiki is truly inert.

### Miscellaneous additional categories

#### *Anxiety, well-being, and Reiki use*

Thornton<sup>33</sup> conducted a quasi-experimental study with mixed methods (qualitative component) to assess the effects of Reiki on anxiety and well-being among female nursing students. The experimental group subjects ( $n = 22$ ) received 1 Reiki treatment, whereas the control group subjects ( $n = 20$ ) received a sham Reiki treatment. The STAI and Barrett's Power as Knowing Participation in Change Tool were administered to each subject before and after the interventions. The researcher reported that following the treatment, the STAI was lower for both the experimental and control groups, but no statistical results or pretest STAI scores were reported. The researcher also reported triangulation of methodology that enabled them to identify congruence between the quantitative and qualitative data from this study. The researcher suggested that the more open subjects are to a Reiki treatment, the greater was their perception of healing.

#### *Neuromuscular system/chronic illness and Reiki use*

Brewitt et al<sup>50</sup> conducted an investigation to evaluate the effects of Reiki on chronic illness. Five

chronically ill subjects received 3 consecutive Reiki sessions followed by 1 Reiki session a week for 8 weeks. Changes in electrical skin resistance at acupuncture conductance points using the Life Information System (LISTEN) device were measured at 40 skin points prior to the first session, after the third session, and at the last session. After statistical adjustment for the small sample size, 3 skin points demonstrated a significant difference after the third Reiki treatment: the left-side NE2 skin point (endocrine-immune system) ( $P < .004$ ,  $t$  value not reported), right-side NE2 skin point ( $P < .003$ ,  $t$  value not reported), and the SPI skin point (adrenal glands) ( $P < .005$ ,  $t$  value not reported).

### Summary of anxiety/well-being and neuromuscular system/chronic illness studies and Reiki use

These two investigations are included in this IR because methodological information was retrievable, however, the reported statistical analyses were abbreviated. Although the hypothesis of anxiety/well-being was not supported in the quantitative component of Thornton's work,<sup>33</sup> the qualitative component includes the possibility that inertness of the placebo treatment affected the results. This phenomenological finding suggests the effects of subtle energy work such as Reiki may be better understood within qualitative research methods.<sup>33,51</sup> The investigation by Brewitt et al<sup>50</sup> indicates a promising method for quantifying the effects of Reiki on the lymphatics and lymph flow in the immune system.

## CONCLUSION: IMPLICATIONS FOR RESEARCH AND PRACTICE

Confusion about what constitutes credible CAM exploration is now the most pressing barrier to the integration of energy work into mainstream healthcare. The lack of empirically based investigations continues to be a common criticism by biomedical practitioners challenging the use of Reiki within the predominant Western allopathic healthcare delivery model. However, scholarly discussion and discourse emanating from TT and HT practitioners, as well as their mixed research outcomes, have direct implications on the development of research designs for the evaluation of Reiki, as is also apparent from

this review. Entwined in this debate is the issue of whether the randomized controlled trial design considered the "criterion standard" in medical research is the optimal methodology for capturing the efficacy of energy work. As previously stated, the field of energy research does not readily lend itself to traditional scientific analyses.<sup>20,52,53</sup> Moreover, when planning randomized controlled trial investigations to evaluate subtle energy work such as Reiki, it is difficult to know whether sham Reiki used in placebo controlled trials is truly inert or just another confounding research variable.<sup>44</sup> According to Shiflett et al<sup>37</sup> and Lee,<sup>52</sup> benign touch may have treatment effects beyond placebo, which was discussed in early Reiki research recommendations presented by Wirth and Barrett,<sup>48</sup> Dressin and Singg,<sup>45</sup> and others.

Fenton<sup>23</sup> concludes that investigators must agree on the methodology and technology required to study the mechanism of energy touch therapies, and strongly recommends that research designs include the actual experience of recipients receiving these therapies as well. Engebretson and Wardell<sup>7</sup> and Shiflett et al,<sup>37</sup> among others, concur that linear research methods applied to energy therapies such as Reiki are not complex enough to capture effectiveness. Quantitative methods with resulting aggregate data alone do not elucidate subtle vibrational energetic changes. This along with individual variations when receiving energy work mitigate against reductionist approaches to evaluation.<sup>7,21</sup> Research recommendations presented as a result of this IR support future Reiki research that diverges from the randomized controlled trial, and encourage scientific inquiry with mixed methodological designs, and qualitative methods to expand and explain findings from quantitative studies.<sup>12,33,36,41</sup> Recurrent themes that challenge the inertness and potential interaction effects around Reiki sham procedures must challenge nurse researchers to identify appropriate strategies to evaluate humanistic energy-based modalities.<sup>7,17,21,31</sup>

This IR was also conducted to assess the status of Reiki treatment protocols, which is clearly inconsistent among all of the articles presented (see Appendix). There is no universal protocol for systematic Reiki hand positions because methods of teaching Reiki are known to vary between masters, and the unique, individualized interaction of the practitioner and recipient. The system of Reiki hand placements that evolved from original Usui Reiki entail (a) 12 hand positions (to start with), (b) hand positions to cover the



| Appendix. Summary of Reiki Touch Therapy Studies* |                                     |                                       |                                   |               |  |   |   |                               |
|---|-------------------------------------|---------------------------------------|-----------------------------------|---------------|--|---|---|-------------------------------|
| Author  | Design                              | Area                                  | Control                           | N             | Measurement  | Results   |   |                               |
|   |                                     |                                       | Reiki protocol detail             | Reiki + other |  |   |   |                               |
| Witte and Dundes <sup>39</sup>                    | Stress/relaxation-depression<br>Q-E | Physical/mental relaxation            | Placebo                           | 100           | HR; BP Pre-post questionnaire (developed for supply) | NS  | LOT: 20 min<br>TYPE: Level I<br>HAND:<br>Sitting recipient: Top of head, back of skull, forehead-occiput front/back of neck<br>No   | Meditation<br>Music           |
| Shore <sup>40</sup>                               | RCT<br>DB                           | Depression stress                     | Distance Reiki<br>Placebo         | 46            | BDI Beck Hopelessness Scale Perceived Stress Scale   | Decrease distress in Reiki tx groups ( $P < .05$ ; $\eta^2$ range = 0.09–0.18) 1 yr later ( $P < .05$ ; $\eta^2$ range = 0.12–0.44) | LOT: 6 tx 1–1.5 h/tx<br>TYPE: Master Reiki and level II<br>HAND: In-person and distance Reiki<br>Front: Top of head, eyes, temples<br>throat, heart, upper- and mid-belly<br>Back: Head, shoulders, neck, back of heart, lower back<br>No |                               |
| Shifflett et al <sup>37</sup>                     | RCT<br>DB                           | Depression                            | Placebo Reiki<br>Historic control | 50            | FIM<br>CES-D   | NS  | LOT: 30 min<br>TYPE: Master Reiki; level I<br>HAND: 12 locations head to toes<br>No   |                               |
| Wardell and Engebretson <sup>12</sup>             | I                                   | Stress reduction response             | No                                | 23            | Salivary IgA and cortisol; BP; electromyograph; STAI | Reduction STAI ( $P = .02$ ) SBP ( $P < .01$ )  | LOT: 30 min<br>TYPE: Master Reiki<br>HAND:<br>Face up: eyes; abdomen<br>LOT: 30-s influence periods<br>TYPE: Master Reiki<br>HAND: Not specified<br>No  |                               |
| Schlitz and Braud <sup>41</sup>                   | E<br>ET                             | Skin resistance response (SRR-stress) | No                                | 15            | SRR Multiple structured and unstructured interviews  | NS-quant  | LOT: 30-s influence periods<br>TYPE: Master Reiki<br>HAND: Not specified<br>No  |                               |
| Pain<br>Wirth et al <sup>42</sup>                 | RCT<br>DB<br>C                      | Postoperative pain                    | Subjects own control              | 21            | VAS 5-point relief scale (PAR)                       | VAS and PAR postoperative hours 4–9 ( $P < .0001$ )   | LOT: Distance Reiki for 15–20 min for 6 h<br>TYPE and HAND: Not specified<br>No   | LeShan healing<br>(continues) |

**Appendix. Summary of Reiki Touch Therapy Studies\* (Continued)**

| Author   | Design   | Area                     | Control                         | N   | Measurement   | Results  | Reiki protocol detail   | Reiki + other            |
|--|----------|--------------------------|---------------------------------|-----|---|--|---|--------------------------|
| Olson and Hanson <sup>43</sup>                       | Pilot I  | Pain                     | No                              | 20  | VAS and Lickert scale   | Reduce pain after Reiki tx: VAS and Lickert scale ( $P < .0001$ )  | LOT: 1 tx, not specified<br>TYPE: Level II<br>HAND: Not specified   | No                       |
| Olson et al <sup>44</sup>                            | RCT      | Pain                     | Standard pain management + rest | 24  | VAS QOL assessment tool BP; HR; pulse; respiration; analgesia use   | Day 1: Less pain ( $P = .005$ ); BP ( $P = .005$ ); drop in pulse ( $P = .019$ )<br>Day 4: Less pain ( $P = .002$ );<br>Days 1-7: Psychological component QOL ( $P = .0002$ )  | LOT: 2 txs of 1.5 h<br>TYPE: Master Reiki<br>HAND: 18 positions<br>Front: 10 positions head to torso<br>Back: 8 positions<br>Back, hip area and feet  | No                       |
| Dressin and Singg <sup>45</sup>                      | E RA     | Pain; mood; personality  | No tx                           | 120 | GIQ; SRSS (LCU) MPQ (PRI-3) types and total; PPI; BDI-II; STAI; Rosenberg Self-Esteem Scale; Belief in Personal Control (BPCS-RS) | GPI ( $P = .0001$ ); PRI sensory ( $P = .03$ ); PRI evaluative ( $P = .001$ ); depression ( $P = .001$ ); state anxiety ( $P = .0001$ ); trait anxiety ( $P = .0001$ ); self-esteem ( $P = .02$ ); locus of control ( $P = .002$ ); unrealistic sense of control ( $P = .01$ ); and faith in God ( $P = .04$ ) | LOT: 30 min<br>TYPE: Master Reiki<br>HAND:<br>Front: Head, jaw, throat, thymus area, over heart, solar plexus, abdomen, knees, toes<br>Back: Back of head, neck, shoulder blades, back of heart, back of solar plexus, hips, back of knees, soles of feet | Progress muscle relax.   |
| <i>Biological correlates</i><br>Wetzel <sup>46</sup> | Q-E      | Hemoglobin studies       | Healthy subjects                | 58  | Hemoglobin (Hgb) Hematocrit (Hct) Questionnaire (developed for study)   | Hgb and Hct ( $P = .01$ )  | LOT: Not specified<br>TYPE: Master Reiki<br>HAND: Not specified   | No                       |
| Wirth et al <sup>46</sup>                            | RCT DB C | Hematological indicators | Subjects own control            | 14  | Blood chemistries   | Time point 2: urea N + ( $P = .02$ ); blood glucose ( $P = .0001$ )<br>Time point 1: blood glucose ( $P = .03$ )   | LOT: 15 min<br>TYPE and HAND: Not specified   | LeShan healing QiGong TT |

(continues)

**Appendix. Summary of Reiki Touch Therapy Studies\* (Continued)**

| Author   | Design             | Area                     | Control                    | N  | Measurement  | Results   | Reiki protocol detail   | Reiki + other                               |
|--|--------------------|--------------------------|----------------------------|----|--|---|---|---|
| Mackay et al <sup>47</sup>   | RCT<br>Pilot<br>DB | Autonomic nervous system | Rest only<br>Placebo Reiki | 45 | HR; CVT; SBP; DBP; mean blood pressure; cardiac sensitivity to baroreflex; baseline respiratory rate (B/R) | HR and DBP ( $P < .005$ ) between Reiki and placebo groups only                                   | LOT: 1 tx; 30 min<br>TYPE: Not specified<br>HAND: 6 positions/subject   | No  |
| <i>Wound healing</i><br>Wirth and Barrett <sup>48</sup>                  | RCT<br>DB<br>C     | Dermal wound healing     | Subjects own control       | 15 | Wound epithelization (days 5 and 10)   | NS Wound healing significant for control ( $P < .04$ )  | LOT and HAND: Not specified<br>TYPE: Distance Reiki   | LeShan healing<br>Prayer TT<br>Bio-feedback |
| Reiki/placebo<br>Mansour et al <sup>49</sup>                             | E<br>RA<br>DB<br>C | Standardize sham Reiki   | Placebo + placebo          | 20 | Questionnaire (for study) Qualitative component  | After round 4, 0% could not distinguish Reiki from placebo/sham Reiki                             | LOT: 15 min<br>TYPE: Reiki level II<br>HAND: Variations: 3–13 positions   | No  |
| <i>Miscellaneous (from other publications)</i><br>Thornton <sup>33</sup> | Q-E                | Anxiety; personal; power | Placebo Reiki              | 42 | STAI Barrett Power as Knowing Participation in Change Tool Qualitative component                           | NS-quan   | LOT, TYPE, and HAND: Not specified  | No  |
| Brewitt et al <sup>50</sup>  | I                  | Neuromuscular system     | No                         | 5  | Electrodermal screening with LISTEN device   | Left-side NE2 point: ( $P < .004$ )<br>Right-side NE2 point: ( $P < .003$ )<br>SPI: ( $P < .05$ ) | LOT: Not specified<br>TYPE: Master Reiki<br>HAND: Over neurovascular region of cranium; neurolymphatic points on trunk; minor Chakra points on limb | No  |

\*Q-E indicates quasi-experimental; RCT, randomized controlled trial; DB, double blind; I, intervention; E, experimental design; ET, ethnographic component; C, crossover; RA, random assignment; NS, not significant; quan, quantitative component. LOT, length of treatment and/or how many Reiki treatments; TYPE, Reiki practitioner (level); HAND, Reiki hand positions utilized in the study; TT, therapeutic touch; HR, heart rate; CVT, cardiac vagal tone; BP, blood pressure; SBP, systolic blood pressure; DBP, diastolic blood pressure; QOL, quality of life; CES-D, Center for Epidemiological Studies-Depression Scale; FIM, Functional Independence Measure; STAI, State-Trait Anxiety Inventory; VAS, visual analog scale; GIQ, General Information Questionnaire; SRRS, Social Readjustment Rating Scale; MPQ, McGill Pain Questionnaire; PPI, Present Pain Intensity; and BDI, Beck Depression Inventory.

main 7 Chakras of the head and trunk, and (c) use of a relative head-to-toe approach.<sup>1,3,54,55</sup> Having said this, this IR is reflective of significant results with limited variations among these traditional Reiki hand positions, which may have considerable ramifications and potential ease of Reiki use in fast-paced clinical settings.<sup>12,44,45,47,50</sup> Usui and Petter<sup>3</sup> concludes that Reiki energy will always flow to where the recipient needs healing. Future Reiki research must include the identification of the Reiki protocol utilized in the work to help gather the needed evidence to answer questions in clinical practice such as: What are clinically useful Reiki hand positions and what length of treatment and number of Reiki sessions are effective? Another untapped area that may yield much needed knowledge for Reiki practice knowledge is the conduct of qualitative investigations with Reiki practitioners, including nurses, to understand the relevance and utility of current Reiki practice details, distance Reiki, and practitioner self-care practices with Reiki.

In conclusion, energy work with Reiki, such as TT or HT, allows a compassionate connection through touch and presence between the provider and recipient with the intent to help or heal. The persistence of the metaphor “hands-on” to mean touch with intent to heal represents the essence of many of today’s holistic nursing practices. Healing touch practices pervade nursing history, and the reemergence of holistic models, strengthened by societal demands, is suggestive of efforts to bring the heart back into work of nursing.<sup>8,22,56</sup> Endorsement of energy work by the American Holistic Nurses Association as well as visionary healing guidance from Florence Nightingale<sup>57</sup> and such modern voices as Martha Rogers<sup>58</sup> and Jean Watson,<sup>56</sup> provide caring-healing conceptual frameworks that offer the potential of advancing the development of caring-healing modalities.<sup>56</sup> Like TT and HT, Reiki energy work is now used in nursing practice to foster wellness, reduce stress, and increase relaxation, with increasing awareness that touch therapies influence the recipient and the practitioner alike. Continued and sustained interest in energy work in nursing is a part of a proactive vision for a discipline poised for 21st century practice. This author believes now is the time to call for leadership from nurse scientists to explore alternative paradigms of inquiry most suitable for nursing science to “connect with” and establish evidence for these evolving humanistic practices.

## REFERENCES

- Honervogt T. *The Power of Reiki: An Ancient Hands-on Healing Technique*. New York: Holt; 1998.
- Stein D. *Essential Reiki: A Complete Guide to an Ancient Healing Art*. Freedom, Calif: Crossing Press; 1996.
- Usui M, Petter FA. *The Original Reiki Handbook of Dr. Mikao Usui*. Twin Lakes, Wis: Lotus Light; 2003.
- Bohm D. *Wholeness and the Implicate Order*. New York: Routledge; 1980.
- Keegan L. *Healing and With Complementary and Alternative Therapies*. Albany, NY: Delmar; 2001.
- Zukav G. *The Seat of the Soul*. New York: Simon & Schuster; 1989.
- Engebretson J, Wardell D. Experience of a Reiki session. *Altern Ther Health Med*. 2002;8:48–53.
- Dossey B, Keegan L, Guzzetta C. *Holistic Nursing: A Handbook for Practice*. 3rd ed. Gaithersburg, Md: Aspen; 2000.
- Gerber R. *A Practical Guide to Vibrational Medicine*. New York: Harper Collins; 2000.
- Ochsman JL. *Energy Medicine: The Scientific Basis*. New York: Churchill Livingstone; 2003.
- Umbreit AW. Healing touch: application in the acute care setting. *AACN Clin Issues*. 2000;11(1):105–119.
- Wardell D, Engebretson J. Biological correlates of Reiki touch healing. *J Adv Nurs*. 2001;33(4):439–445.
- Wardell DW, Weymouth KF. Review of studies of healing touch. *J Nurs Scholarsh*. 2004;36(2):147–154.
- National Center of Complementary and Alternative Medicine. Statistics on CAM use. 2005. Available at: [www.nccam.nih.gov/health](http://www.nccam.nih.gov/health). Accessed March 21, 2006.
- Tindle HA, Davis RB, Phillips RS, Eisenberg DM. Trends in the use of complementary and alternative medicine by US adults. *Altern Ther Health Med*. 2005;11:42–49.
- Gordon J. The White House Commission on Complementary and Alternative Medicine Policy and the future of healthcare. *Altern Ther Health Med*. 2004;10:20–23.
- Schiller R. Reiki: a starting point for integrative medicine. *Altern Ther Health Med*. 2003;9:20–22.
- Peters RM. The effectiveness of therapeutic touch: a meta-analytic review. *Nurs Sci Q*. 1999;12:52–61.
- Potter P. What are the distinctions between Reiki and therapeutic touch? *Clin J Oncol Nurs*. 2003;7(1):1–3.
- Wardell DW, Weymouth KF. Review of studies of healing touch. *J Nurs Scholarsh*. 2004;36(2):147–154.
- Miles P, True G. Reiki—a review of biofield therapy history, theory, practice and research. *Altern Ther Health Med*. 2003;9:62–71.
- American Holistic Nurses Association. Position statements. 2006. Available at: <http://www.ahna.org/home/home.html>. Accessed March 28, 2006.
- Fenton M. Therapeutic touch: a nursing practice. *Altern Ther Health Med*. 2003;9:34–35.
- Newsham G, Schuller-Civetela A. Large clinical study shows value of therapeutic touch program. *Holist Nurs Pract*. 2003;17(4):189–192.
- Bullock M. Reiki: a complementary therapy for life. *Am J Hospice Palliat Care*. 1997;14(1):31–33.
- Engebretson J. Hands on: the persistent metaphor in nursing. *Holist Nurs Pract*. 2002;16:20–35.
- Gallob R. Reiki: a supportive therapy in nursing practice and self-care for nurses. *J NY State Nurses Assoc*. 2003;34(1):1–5.
- Honervogt T. Reiki—healing and harmony thru the hands. *Positive Health*. 2001;10:11–13.
- Lipinski K. Finding Reiki: applications for your nursing practice. *Beginnings*. 2006;26(1):6–7.
- Miles P. Reiki vibrational healing. *Advances*. 2003;19(3):47–54.
- Nield-Anderson L, Ameling A. Reiki—a complementary therapy for nursing practice. *Altern Complement Ther*. 2000;4:42–49.

32. Barnett L, Chambers M. *Reiki Energy Medicine—Bringing Healing Touch Into the Home, Hospital, and Hospice*. Rochester, Vt: Healing Arts Press; 1996.
33. Thornton L. A study of Reiki, an energy field treatment, using Roger's science. *Rogerian Nurs Sci News*. 1996;8(3):14–15.
34. Vitale AT, O'Connor P. The effect of Reiki on pain and anxiety in women with abdominal hysterectomies: a quasi-experimental pilot study. *Holist Nurs Pract*. 2006;20(6):263–271.
35. Whelan KM, Wishnia GS. Reiki therapy: the benefits to a nurse/Reiki practitioner. *Holist Nurs Pract*. 2003;17(4):209–217.
36. Wetzel W. Reiki healing: a physiologic perspective. *J Holist Nurs*. 1989;7(1):47–54.
37. Shiflett S, Nayak S, Champa B, Miles P, Agostinelli P. Effect of Reiki treatments on the functional recovery of in patients in poststroke rehabilitation: a pilot study. *J Altern Complement Med*. 2002;8(6):755–763.
38. Benor DJ. *Spiritual Healing: Scientific Validation of a Healing Revolution*. Southfield, Mich: Vision; 2002.
39. Witte D, Dundes L. Harnessing life energy or wishful thinking? *Altern Complement Ther*. 2001;10:304–309.
40. Shore AG. Long-term effects of energetic healing on symptoms of psychological depression and self-perceived stress. *Altern Ther Health Med*. 2004;10(3):42–48.
41. Schlitz MJ, Braud WG. Reiki-plus natural healing: an ethnographic/experimental study. *PSI Res*. 1985;4(3):100–123.
42. Wirth DP, Brenlan DR, Levine RJ, Rodriguez CM. The effect of complementary healing therapy on postoperative pain after surgical removal of impacted third molar teeth. *Complement Ther Med*. 1993;1:133–138.
43. Olson K, Hanson J. Using Reiki to manage pain: a preliminary report. *Cancer Prev Control*. 1997;1(2):108–113.
44. Olson K, Hanson J, Michaud M. A phase II trial of Reiki for management of pain in advanced cancer patients. *J Pain Symptom Manage*. 2003;26(5):990–997.
45. Dressin LJ, Singg S. Effects of Reiki on pain and selected affective and personality variables of chronically ill patients. *Subtle Energies Energy Med*. 1998;9(1):53–82.
46. Wirth DP, Chang RJ, Edelman WS, Paxton JB. Haematological indicators of a complementary intervention. *Complement Ther Med*. 1996;4(14):20–24.
47. Mackay N, Hansen S, McFarlane O. Autonomic nervous system changes during Reiki treatment: a preliminary study. *J Altern Complement Med*. 2004;10(6):1077–1081.
48. Wirth DP, Barrett MJ. Complementary healing therapies. *Int J Psychosom*. 1994;41(1):61–67.
49. Mansour A, Beuche M, Laing G, Leis A, Nurse J. A study to test the effectiveness of placebo Reiki standardization procedures developed for a planned Reiki efficacy study. *J Altern Complement Ther*. 1999;5(2):153–164.
50. Brewitt B, Vittretoe T, Hartwell B. The efficacy of Reiki: improvements in spleen and nervous system function as quantified by electro-dermal screening. *Altern Ther*. 1997;3:89–97.
51. Thornton L. A study of Reiki using Roger's science; part II. *Rogerian Nurs Sci News*. 1997;8(4):13–14.
52. Lee CO. Biomedical, complementary, and alternative medicine: significant issues. *Clin J Oncol Nurs*. 2004;8(6):670–674.
53. O'Mathuna DP. Reiki for relaxation and pain relief. *Altern Ther Women's Health*. 2003;4:29–32.
54. Petter FA. *Reiki: The Legacy of Dr Usui*. Twin Lakes, Wis: Lotus Light; 1999.
55. Petter FA. *Reiki Fire*. Twin Lakes, Wis: Lotus Light; 2003.
56. Watson J. *Caring Science as Sacred Science*. Philadelphia: FA Davis; 2005:78–82.
57. Nightingale F. In: Dolan MB, ed. *Notes on Nursing: What It Is and Is not*. New York: Barnes-Noble; 2003.
58. Rogers ME. The science of unitary human beings: current perspectives. *Nurs Sci Q*. 1994;2:33–35.