Integrative Cancer Therapies
2014, Vol. 13(1) 62–67
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DOI: 10.1177/1534735413503547
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Integrative Reiki for Cancer Patients: A Program Evaluation

Kimberly A. Fleisher, MEd[1], Elizabeth R. Mackenzie, PhD[1], Eitan S. Frankel, BA[1], Christina Seluzicki, BA[1], David Casarett, MD[1], and Jun J. Mao, MD, MSCE[1]

Abstract

Objective. This mixed methods study sought to evaluate the outcomes of an integrative Reiki volunteer program in an academic medical oncology center setting. *Method*. We used de-identified program evaluation data to perform both quantitative and qualitative analyses of participants' experiences of Reiki sessions. The quantitative data were collected pre- and postsession using a modified version of the distress thermometer. The pre- and postsession data from the distress assessment were analyzed using a paired Student's *t* test. The qualitative data were derived from written responses to open-ended questions asked after each Reiki session and were analyzed for key words and recurring themes. *Results*. Of the 213 pre–post surveys of first-time sessions in the evaluation period, we observed a more than 50% decrease in self-reported distress (from 3.80 to 1.55), anxiety (from 4.05 to 1.44), depression (from 2.54 to 1.10), pain (from 2.58 to 1.21), and fatigue (from 4.80 to 2.30) with $P < .001$ for all. Using conservative estimates that treat missing data as not endorsing Reiki, we found 176 (82.6%) of participants liked the Reiki session, 176 (82.6%) found the Reiki session helpful, 157 (73.7%) plan to continue using Reiki, and 175 (82.2%) would recommend Reiki to others. Qualitative analyses found that individuals reported that Reiki induced relaxation and enhanced spiritual well-being. *Conclusions*. An integrative Reiki volunteer program shows promise as a component of supportive care for cancer patients. More research is needed to evaluate and understand the impact that Reiki may have for patients, caregivers, and staff whose lives have been affected by cancer.

Keywords

Reiki, cancer, relaxation, pain, symptom, distress

Introduction

Compared with the general population, the rate of complementary and alternative medicine (CAM) use among individuals with cancer is high.[1-3] Recent data from the 2007 National Health Interview Survey shows that 43.3% of US cancer survivors used CAM in the past year, while 66.5% reported using CAM during their lifetime.[4] Cancer patients often seek CAM treatments in attempts to improve wellness, strengthen immunity, and better manage their symptoms.[1] In response to substantial levels of unmet needs among cancer patients, the field of integrative oncology has grown rapidly in the past decade.[5,6] Moreover, recent studies have found that CAM use may be associated with positive spiritual transformation,[4] a finding that may shed light on the potential psychosocial benefits of CAM in supportive cancer care.

One specific CAM modality that has shown promise in the oncology setting is Reiki[7]—a gentle, noninvasive practice believed to stimulate a person's own healing response via placement of light touch on or slightly above the participant's body.[8] Originally formulated in the early 20th century by Mikao Usui, a Japanese Buddhist and spiritual teacher, Reiki was adapted to the clinical setting by one of his students. Brought to the United States in the 1930s, it underwent further changes before spreading throughout North America.[8] Despite the dearth of understanding regarding its mechanism of action, Reiki has demonstrated value as a component of supportive cancer care[9,10] and is being introduced in a range of clinical settings, including integrative oncology. The existing literature suggests that Reiki may help cancer patients better manage their symptoms, allowing for better control of pain, fatigue, and anxiety,[7,9,11,12] and may help increase patients' overall sense of

[1]University of Pennsylvania, Philadelphia, PA, USA

Corresponding Author:
Jun J. Mao, Department of Family Medicine and Community Health, Perelman School of Medicine at University of Pennsylvania, 3400 Spruce Street/2 Gates, Philadelphia, PA 19104, USA.
Email: jun.mao@uphs.upenn.edu

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well-being and quality of life.[12,13] Birocco et al[14] conducted a study of hospital-based Reiki for cancer patients (n = 118) and found that Reiki sessions reduced anxiety and enhanced well-being, relaxation, pain relief, and sleep quality.[14]

Since 2008, our urban academic cancer center has hosted an entirely volunteer-based Reiki program in an oncology setting. As of December 31, 2012, the program's Reiki volunteers have provided 4782 sessions. As part of the outcome evaluation of this program, quantitative and qualitative data were collected with the following specific aims: (1) to quantify any pre–post symptom changes among patients who received Reiki treatments and (2) To understand the experiences of patients participating in the Reiki sessions in the integrative oncology setting.

Materials and Methods

Description of the Reiki Volunteer Program

Our urban academic cancer center's Reiki volunteer program uses an all-volunteer staff of Reiki practitioners. Practitioners are all either certified Reiki Masters or certified Reiki 2 practitioners enrolled in a Reiki Level 3 or Reiki Master Training program. Reiki 3 and Reiki Master students are supervised by our program's team leader. Potential practitioners undergo an application process to verify their credentials and gauge their ability to function in an academic medical setting. Once approved, they are mentored and observed before offering sessions on their own.

Reiki sessions are offered free of charge primarily to patients receiving cancer treatment, but time permitting, also to their caregivers. Staff members are also eligible to receive sessions, and can do so by request. Sessions are accessible to patients based on space and availability, and generally last 10 to 30 minutes; they are provided during chemotherapy treatment (or other infusions), before or after radiation oncology/proton beam therapy, or at the hospital during inpatient stays. During each session, the practitioners perform personalized hand placements tailored to meet participants' preferences, time constraints, and ease/accessibility to touch. While treatment regimens are individualized, practitioners generally offer 3 to 5 basic hand positions on the head, torso, arms, legs, and feet of the participant.

Multiple steps are taken to ensure that potential participants are aware of the presence and potential benefits of the program. Printed educational materials are distributed at each of the locations where Reiki sessions are performed, and verbal education by nursing staff, chaplains, social workers, Reiki volunteers, and other clinicians informs eligible patients and caregivers about program availability. Patients can either request a session or consent to a session when offered by a practitioner. In addition, not all patients who are offered Reiki elect to receive it, and patients wishing to receive multiple sessions are usually able to do so if they can be accommodated. Typically, there is at least one volunteer on call each weekday, and volunteers commit to offering at least 3 hours of service, weekly.

Outcome Evaluation Process

To evaluate the Reiki program, we collected data from participants who received Reiki sessions between February 1, 2010 and October 27, 2010. We designed a survey instrument as well as a modified version of the Distress Thermometer (DT). The DT is a well-validated tool used to assess emotional distress as well as anxiety and depression among patients with cancer. The DT consists of one assessment: "How distressed have you been during the past week including today on a scale of 0 to 10?" Patients answer the question by filling in a diagrammed thermometer, with responses ranging from "0" (*none*) to "10" (*extreme*). We expanded the original tool to include assessments of depression, anxiety, pain, and fatigue in addition to distress, an approach used by other research groups as well.[15] Research suggests that patients' recall of their pain in the previous week is congruent with their current pain intensity.[16]

Although filling out a survey was not a requirement for receiving a session, practitioners were instructed to offer a survey to each participant physically capable of filling one out. Prior to each Reiki session, subjects were asked to rate their outcome severities using the modified DT. Immediately following the Reiki session, subjects again completed the DT assessment, and were additionally asked to rate the following statements on a scale of 0 (*not at all*) to 4 (*very much*): "I liked the Reiki session," "The Reiki session was helpful to me," "I plan to continue using Reiki," and "I would recommend Reiki to others." For analysis, responses of "3" or "4" were considered an affirmation of the statement. Participants were also given space to write down their experiences in their own words. To decrease social desirability bias, participants completed the surveys after the Reiki practitioner exited the room, and surveys were collected by the nurses.

Outcome Evaluation Research

We received approval from the institutional review board of our university and also the Clinical Trial Scientific Review and Monitoring Committee of our urban academic cancer center to use de-identified data to conduct secondary analyses. For quantitative analyses, we examined the distribution of scores. The pre–post data from the distress thermometer was then analyzed using a paired Student's *t* test ($P < .05$ indicating statistical significance, two-sided). Qualitative data were derived from the subset of participants who provided written feedback on their experiences with the Reiki sessions. This written feedback was first translated into an MSWord file. A qualitative research

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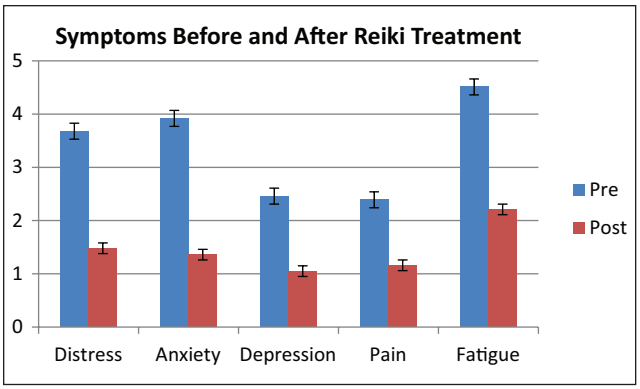

Figure 1. Reduction of symptom distress pre/post Reiki session.

expert (ERM) performed a content analysis (counting the appearance of key words), followed by identification of major recurring themes. She generated a "word cloud" (also known as a text cloud) to visually represent the appearance of key words, in which words that frequently appeared were signified by larger font.

Results

Description of the Study Population

For the program evaluation period, 213 participants completed at least one survey. Of these participants, 162 (76.1%) received one treatment session and 51 (23.9%) received multiple sessions. Among the group receiving multiple sessions, the median was 2 sessions, and the range was 2 to 11. The repeat sessions created a total sample of 305 sessions with survey evaluations performed by 14 practitioners. Among the 213 first treatment sessions, 83 (39.0%) occurred in Chemotherapy, 63 (29.6%) in Radiation Oncology, and 3 (1.4%) in an inpatient setting; for 64 (30.0%), the location was not specified. Patients received 118 (55.4%) sessions, caregivers received 21 (9.9%), staff received 5 (2.4%), and 69 (32.4%) subjects did not state their subject type. Of the 213 sessions, 136 (63.9%) were performed on women, 50 (23.5%) on men, and 27 (12.7%) on subjects of unstated gender.

Quantitative Results

Based on an analysis of 213 first-time sessions, patients reported a 50% or greater reduction in distress (from 3.80 to 1.55), anxiety (from 4.05 to 1.44), depression (from 2.54 to 1.1.0), pain (from 2.58 to 1.21) and fatigue (from 4.80 to 2.30) with $P < .001$ for all (see Figure 1). For each of the 4 satisfaction questions in the questionnaire, approximately 12% to 15% of the responses were missing. Conservatively estimating that missing values count as "not endorsing," 176 (82.6%) participants liked the Reiki session, 176 (82.6%) found the Reiki session helpful, 157 (73.7%) plan to continue using Reiki, and 175 (82.2%) would recommend Reiki to others. With a sensitivity analysis omitting the missing responses in the sample, the endorsement numbers of Reiki were much higher: 176 (94.6%) of participants liked the Reiki session, 176 (94.6%) found the Reiki session helpful, 157 (86.7%) planned to continue using Reiki, and 175 (93.6%) would recommend Reiki to others.

Qualitative Results

A generated word cloud (see Figure 2) demonstrated that "relaxation" is the experience that participants most frequently describe. Content analysis of the data further revealed the following major recurring themes: (1) increased relaxation and peace, (2) symptom relief, (3) physiological response, (4) stronger sense of connection with self and others, (5) enhanced positive thinking and a feeling of healing, and (6) freedom and release (see Table 1 for sample quotes).

Relaxation and peace: The most common words used to describe the feelings evoked during a Reiki session were "relaxed," "relaxation," and "relaxing." Patients also expressed feelings of peacefulness, warmth, and calm.

Symptom relief: Patients described relief from both psychological and physical symptoms, such as anxiety, stress, fatigue, muscle tension, stiffness, and pain. They often described this relief as being simultaneously psychological and physiological (not distinguishing between mind and body).

Physiological response: Several patients wrote about how the Reiki sessions lowered their blood pressure or reduced their heart rate, perhaps a physical indication of the relaxation response.

Sense of connection: Some patients wrote about how the Reiki session produced a sense of connection with others (such as deceased relatives) or with their own authentic emotions, prompting a profound feeling of well-being.

Positive thinking and sense of healing: There were a number of participants who credited the Reiki sessions with providing a sense of healing and helping them to think positively about their body's capacity for healing.

Freedom and release: A few participants felt that Reiki allowed them to be emotionally vulnerable and to experience a sense of freedom by alleviating the burden of their diagnosis.

Discussion

Cancer and its conventional treatments (ie, surgery, chemotherapy, and radiation) affect individuals (ie, patients,

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Figure 2. Word cloud: Patient experience of Reiki.

caregivers, staff) physically, emotionally, and spiritually. In this article, we analyzed data collected as part of an evaluation of a Reiki volunteer program in a large, urban academic cancer center. We found that even by a conservative estimate, 82.6% of individuals who received Reiki had positive experiences. Reiki produced clinically meaningful and statistically significant short-term reductions in distress, anxiety, depression, pain, and fatigue. Qualitative data suggests that Reiki evoked a relaxation response for many and positive spiritual changes for some. These data provide initial evidence that Reiki may be a useful supportive care method if integrated into conventional cancer care.

Our findings reflect the existing literature of Reiki among cancer populations. For example, Bossi et al[7] reported on Reiki sessions offered at the Dana-Farber Cancer Institute in Boston, Massachusetts; more than 100 Reiki sessions were provided in the first year of the program, mostly for symptom management (ie, pain, anxiety,

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Table 1. Themes and Illustrative Quotes From Participants (N = 175).

Number	Theme	Quote
1	Relaxation/peace	"It provided a general sense of peace and muscle relaxation over my entire body that I otherwise have not experience in a few years."
		"It had a very calming effect on me. I could actually feel my body relaxing. I was able to let go of a lot of my anxiety."
2	Symptom relief	"Less pain; I feel better emotionally."
		"Eased the tension I had in the back of my neck."
3	Physiological response	"When visiting my doctors, my blood pressure was high. During Reiki, my pressure dropped over 20 points."
		"Could feel myself relaxing and my heart rate, which was high when I got here, definitely lowered."
4	Sense of connection	"The way it connected me to a place inside myself that I forgot all about"
		"Time and space to connect to my own emotions and connect with the healing visualization, breathing . . ."
		"It was my own personal time to take a minute and deal with what was really happening"
		"I had a wonderful feeling; my father passed away this time last year and I felt connected to him. I was able to release my emotions through crying."
5	Positive thinking/ healing	"The calming and energy I feel through my entire body. Each time I come to the clinic my progress, health wise, keeps improving. I believe these Reiki sessions have a direct healing effect on my body."
		"The sessions help to focus on the healing taking place in the body and make the cancer seem weak and less forceful."
6	Freedom/release	"Freedom is the word that comes to mind."
		"It made me cry. Just having the time to let it out, I always feel that I need to be so strong for everyone. It was liberating to let that weight get lifted."

nausea, and sleep disturbances). Anecdotal evidence in the form of short patient narratives indicated positive results and a high degree of patient satisfaction. A phase II trial of Reiki for symptom management in 24 cancer patients found that patients who received Reiki in addition to standard opioids reported improved pain control ($P < .05$) and quality of life ($P = .002$), but there was no overall reduction in opioid use.[13] In a pilot crossover study of cancer-related fatigue (n = 16), Tsang et al[11] found that Reiki improved quality of life ($P < .01$), diminished fatigue ($P = .05$), and decreased pain ($P < .005$) and anxiety ($P < .01$). Hibdon[12] explored the ways in which Reiki and other biofield therapies benefit cancer patients by reducing anxiety, easing some symptoms, enhancing overall health, and increasing a sense of well-being. Finally, Beard et al[9] reported that in a group of 54 men being treated for prostate cancer who were randomized to 2 experimental groups and 1 control group, relaxation response therapy and Reiki both positively affected anxiety.

Our findings offer initial evidence that Reiki may help fulfill the spiritual needs of some cancer patients. Conventional oncology practices, even those characterized as "supportive care," often do not meet patients' emotional and spiritual needs.[17] Reiki may help meet these needs by providing an enhanced experience of human connection and caring, fostering relaxation and tranquility, offering relief from psychological stress, allowing forgiveness of self and emotional freedom, and enhancing feelings of healing and positive thinking. According to Hungelmann et al,[18] spiritual well-being can be defined as "a sense of harmonious interconnectedness between self, others, nature, and Ultimate Other which exists throughout and beyond time and space." To the extent that Reiki can facilitate these feelings of connection, it may be an important method for enhancing spiritual well-being in cancer patients, resulting in improvements in psychological well-being.

To fully realize the potential of Reiki as an integrative oncology practice, further research on the therapy needs to be conducted.[14,19] Our data demonstrated that relaxation is the most identified experience by participants, and this pathway might be the mechanism by which Reiki produces clinically meaningful effects (ie, pain and fatigue reduction). With the increased biological understanding of stress and relaxation responses,[20-22] Reiki research can incorporate appropriate biomarkers to elucidate Reiki's mechanism of action. Based on our data, Reiki also appears to produce short-term, clinically meaningful reductions in symptoms that may be particularly relevant to pain management, mental health and palliative care.[9,10] Future research on Reiki should seek to use biometrics common to the biology of stress (ie, blood pressure, heart rate variability, stress hormones) and validated patient-reported outcomes to further understand the relationship between biological change and symptom reduction.

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Because of the nature of secondary analysis, this study had several limitations. First, we used a convenience sample of patients who self-selected for Reiki sessions. Second, the qualitative data were less than ideal because they were derived from write-in evaluation forms rather than verbatim transcripts. Third, we only evaluated the results of one session and cannot comment on any long-lasting benefits or changes. Fourth, although the DT has been widely used in many studies of cancer patients, it is most commonly used longitudinally over longer periods of time and has not been fully validated to assess momentary changes in distress following an intervention. Finally, the lack of a control group raises the possibility that some of the quantitative changes may be due to regression to the mean effect, and therefore our results cannot be interpreted as definitive evidence of efficacy.

Conclusions

Despite its limitations, our study included a large group of patients over hundreds of sessions and provides the initial evidence that participants like a Reiki volunteer program. Reiki may have positive short-term benefits, especially in meeting the spiritual and emotional needs of cancer patients. In addition, it may activate the relaxation response. More rigorous research is needed to evaluate the impact of Reiki on longer term psychological, physical, and spiritual well-being of those whose lives have been affected by cancer.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This research is funded in part by the generous contribution of Judy and Morris Matsunobu whose support of the Integrative Oncology Program at the Abramson Cancer Center is in honor of their loving daughter Naomi Matsunobu.

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