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Immediate Symptom Relief After a First Session of Massage Therapy or Reiki in Hospitalized Patients: A 5-Year Clinical Experience from a Rural Academic Medical Center

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Abstract

Objectives: There is an increasing demand for and use of alternative and complementary therapies, such as reiki and massage therapy, in hospital-based settings. Most controlled studies and practice-based reports include oncology and surgical patient populations; thus the effect in a more heterogeneous hospitalized patient population is hard to estimate. We examined the immediate symptom relief from a single reiki or massage session in a hospitalized population at a rural academic medical center.

Design: Retrospective analysis of prospectively collected data on demographic, clinical, process, and quality of life for hospitalized patients receiving massage therapy or reiki.

Settings/Location: A 396-bed rural academic and tertiary medical center in the United States.

Subjects: Hospitalized patients requesting or referred to the healing arts team who received either a massage or reiki session and completed both a pre- and post-therapy symptom questionnaire.

Interventions: First session of routine reiki or massage therapy during a hospital stay.

Outcome measures: Differences between pre- and postsession patient-reported scores in pain, nausea, fatigue, anxiety, depression, and overall well-being using an 11-point Likert scale.

Results: Patients reported symptom relief with both reiki and massage therapy. Analysis of the reported data showed reiki improved fatigue (−2.06 vs. −1.55 $p < 0.0001$) and anxiety (−2.21 vs. −1.84 $p < 0.001$) statistically more than massage. Pain, nausea, depression, and well being changes were not statistically different between reiki and massage encounters. Immediate symptom relief was similar for cancer and noncancer patients for both reiki and massage therapy and did not vary based on age, gender, length of session, and baseline symptoms.

Conclusions: Reiki and massage clinically provide similar improvements in pain, nausea, fatigue, anxiety, depression, and overall well-being while reiki improved fatigue and anxiety more than massage therapy in a heterogeneous hospitalized patient population. Controlled trials should be considered to validate the data.

Keywords: reiki, massage, symptom relief, hospital

Introduction

Although many definitions exist for massage,[1] for the frail or hospitalized patient populations, massage can be defined as ''any skilled systematic form of touch applied with sensitivity and compassion by professionally trained massage therapists with the specific intent of increasing comfort, complementing medical treatment, improving clinical outcomes, and promoting wholeness.''[2] Reiki, a Japanese term for ''universal life energy,'' is an ancient traditional energy therapy designed to help the body's natural healing system through rebalancing of the energy fields of the body.[3]

Hospitalized patients often experience distressing symptoms secondary to their disease process, and over the years there has been an increased interest in the use of complementary alternative medical approaches, such as reiki and

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massage therapy, to address these symptoms particularly due to the lack of significant side effect profile associated with these generally nonpharmacological approaches. In a recent study of hospitalized patients, 82% of interviewed patients ($n=100$) perceived massage therapy as being helpful and 70% were willing to pay for this service.[4] In a survey of hospitals, 42% are offering complementary and alternative therapies and 85% reported that patient demand was the primary reason for offering the services.[5]

Tables 1 and 2 summarize the literature describing symptomatic benefits of massage therapy and reiki for hospitalized patients. Of note, there is an over-representation of surgical

Table 1. Review of Literature Supporting Massage Therapy for Hospitalized Patients

Study	*Design*	*Patient sample*	*Outcomes*
Ahles TA, J Pain Symptom Manage, 1999[6]	Randomized controlled trial Massage vs. no massage	Inpatient hematopoietic stem cell transplant patients $N=35$	↓Distress ↓Fatigue ↓Nausea ↓Anxiety ↓Fatigue
Adams R, Int J Ther Massage Bodywork, 2010[7]	Convenience sampling, pre–post comparison	Heterogeneous inpatients with pain (different units) $N=53$	↓Pain ↑Well-being ↑Relaxation ↑Sleep
Boitor M, Heart Lung, 2017[8]	Systematic review and meta-analysis	Post-thoracic surgery $N=12$ studies	↓Pain
Boyd C, Pain Med, 2016[9]	Meta-analysis	Postoperative pain $N=16$ studies	↓Pain ↓Anxiety
Braun LA, J Thorac Cardiovasc Surg, 2012[10]	Randomized controlled trial Massage vs. control	Postcardiac surgery $N=152$	↓Pain ↓Anxiety ↓Muscle tension ↑Relaxation ↑Satisfaction
Cassileth BR, J Pain Symptom Manage, 2004[11]	Pre–post comparison	Oncology inpatients $N=1290$ (74% inpatients)	↓Pain ↓Fatigue ↓Anxiety ↓Depression ↓Nausea ↓Other
Currin J, Cancer Nurs, 2008[12]	Nonrandomized, single-arm pre–post comparison	Oncology inpatients $N=251$	↓Pain ↓Physical discomfort ↓Emotional discomfort ↓Fatigue
Dreyer NE, Complement Ther Clin Pract, 2015[13]	Randomized controlled trial Massage vs. control	Postcolorectal surgery $N=127$	↓Pain ↓Tension ↓Anxiety
Johnson JR, J Natl Cancer Inst Monogr, 2014[14]	Retrospective chart review Integrative medicine (17%) vs. no integrative medicine Integrative medicine consisted of: 54% bodywork, 13% mind–body	Inpatient oncology patients $N=10,948$ admissions	↓Pain ↓Anxiety *Bodywork improved pain more then mind–body; no difference for anxiety
Johnson JR, BMC Complementary and Alternative Medicine, 2014[15]	Retrospective chart review Integrative medicine (11%) vs. no integrative medicine Integrative medicine consisted of: 46% bodywork, 13% mind–body	Inpatient cardiology patients $N=57,295$ admissions	↓Pain ↓Anxiety *Mind–body/energy therapies more effective then bodywork for anxiety
Ozlu ZK, Afr J Tradit Complement Altern Med, 2017[16]	Controlled trial Massage vs. no massage	Surgical inpatients $N=60$	↑Sleep
Saatsaz S, Complement Ther Clin Pract, 2016[17]	Randomized controlled trial Massage vs. no massage	Postelective caesarian $N=156$	↓Pain ↓Anxiety
Turan N, Gastroenterol Nurs, 2016[18]	Randomized controlled trial Massage vs. control	Orthopedic or trauma surgery $N=60$	↓Constipation ↑Quality of life

↓, decreased; ↑, increased; *, note.

Table 2. Review of Literature Supporting Reiki for Hospitalized Patients

Study	*Design*	*Patient sample*	*Outcomes*
Baldwin AL, Holist Nurs Pract, 2017[19]	Controlled trial Reiki vs control	Postknee replacement $N=46$	↓Pain ↓Anxiety
Johnson JR, J Natl Cancer Inst Monogr, 2014[14]	Retrospective chart review Integrative medicine (17%) vs. no integrative medicine Integrative medicine consisted of: 54% bodywork, 13% mind–body	Inpatient oncology patients $N=10{,}948$ admissions	↓Pain ↓Anxiety *Bodywork improved pain more than mind–body; no difference for anxiety
Johnson JR, BMC Complementary and Alternative Medicine, 2014[15]	Retrospective chart review Integrative medicine (11%) vs. no integrative medicine Integrative medicine consisted of: 46% bodywork, 13% mind–body	Inpatient cardiology patients $N=57{,}295$ admissions	↓Pain ↓Anxiety *Mind–body/energy therapies more effective then bodywork for anxiety
Olson K, J Pain Sympt Manage, 2003[20]	Randomized controlled trial Reiki vs. control	Advanced oncology patients (inpatient percent unknown) $N=24$	↓Pain ↑Quality of life
Sagkal Midilli T, Holist Nurs Pract, 2016[21]	Randomized controlled trial Reiki vs. control	Post-caesarian $N=45$	↓Pain ↓Analgesics
Shiflett SC, J Altern Complement Med, 2002[22]	Randomized controlled trial Reiki vs. control	Poststroke subacute rehabilitation $N=50$	No change: function No change: depression
Vitale AT, Holist Nurs Pract, 2006[23]	Quasiexperimental Reiki vs. control	Postabdominal hysterectomy $N=22$	↓Pain ↓Analgesics ↓Anxiety

↑, increased; ↓, decreased; *, note.

and oncology inpatients. In addition, there is a paucity of data supporting reiki for hospitalized patients, and where there are data, the sample sizes are small. Despite these gaps in the literature, there are publications specific to training reiki or massage therapy practitioners for inpatient practice[24,25] as well as guidance around how to create, grow, and sustain these practices in a hospital setting.[26–29]

Healthcare systems are being asked to invest in this service for their patients. Using controlled trials to inform these investment decisions is challenging since these studies are designed to selectively enroll or exclude participants and minimize variation in the delivery of the service, neither of which reflect real-world clinical practice. A system of care needs to know that services, such as reiki or massage, will be beneficial to a broad range of hospitalized patients despite being delivered by practitioners that may vary in skill, experience, and even style. Memorial Sloan Kettering published such a practice-based study for massage therapy, but the population included only oncology patients (74% inpatients).[11] In our rural academic medical center, we have been offering reiki and massage therapy to our heterogeneous hospitalized patient population for 35 years, including cancer and noncancer diagnoses.

We report on our last 5 years of clinical experience for immediate post-therapy symptom relief in a generalized hospital population receiving a first session of massage or reiki therapy. We aim to demonstrate, in a real-world practice-based setting, the benefits of massage therapy or reiki for a healthcare system looking to invest for its heterogeneous inpatient population. We also aimed to identify if there were any significant demographic, clinical, or therapy-based variables associated with immediate symptom relief.

Materials and Methods

Setting/subjects

The study was conducted in a 396-bed rural academic and tertiary medical center in the United States, where healing arts have been offered to patients since 1983. The healing arts staff consist of the healing arts coordinator (B.P.) who works 20 h per week, four volunteer reiki practitioners working approximately 11 h per week and four contracted licensed massage therapists (LMTs) working a total of 18 h per week. These volunteers and the LMTs are Reiki 1, Reiki 2, and/or Reiki Master trained. The healing arts program visits patients in the hospital's comprehensive cancer center and inpatients at the main hospital.

Hospitalized patients regardless of diagnosis could be referred by any member of the clinical team or could also self-refer. In addition, there was an automatic order for ''as needed'' massage for any patient admitted for interleukin-2 therapy or bone marrow transplantation. Patients who had been on the healing arts program list on previous admissions were placed back on the list to be offered massage or reiki if/when readmitted to the hospital. Therefore, some patients received a ''first massage or reiki session'' on multiple admissions.

As part of the clinical care provided to patients seen in the hospital, pre- and post-therapy patient-reported questionnaires

on quality of life and symptoms were completed around a session of massage therapy or reiki to track response to the therapy. If the patient was critically ill, intubated, confused, or delirious, then the practitioner did not complete questionnaires. If the patient was asleep, no post-therapy questionnaire was completed as patient comfort was a higher priority than data acquisition. Completed questionnaires did not always have all information fields completed. This included patients not filling out information on all symptoms before or after a session, as well as demographic or clinical information the practitioner did not have time to fill out after the session.

Author (B.P.) trained LMTs and reiki volunteers individually regarding questionnaire acquisition for quality assurance of the program. Topics covered in this training included: introducing and normalizing the questionnaire, defining the components of the questionnaire for the practitioner, review of the process for completing it with a participant, and finally trouble shooting. B.P. remained available throughout this period for '' just-in-time'' education and guidance for practitioners.

Due to the frailty of the population receiving massage therapy or reiki at our institution, approximately one-quarter of patients requested assistance in completing the patient-reported questionnaires. In these cases, the practitioner was trained to read the questions verbally and document the patient's response on the Likert scale. The questionnaires were stored in a HIPAA-compliant file system as well as entered onto a centralized excel worksheet that was password protected behind the hospital's firewall. There was no formal research consent as information was collected for documentation in the medical record and to evaluate quality improvement over time.

Intervention/description of massage therapy and reiki in practice setting

A LMT or reiki volunteer approached referred or readmitted patients to confirm their desire to receive massage therapy or reiki during that hospital admission. LMTs offered participants their choice of massage or reiki, but reiki volunteers only offered reiki.

There was no standard protocol for massage therapy or reiki, and the healing arts therapists were given latitude to craft a plan that was patient-preference focused. LMTs offered participants their preference for location of treatment (for example, back/neck, feet/lower extremities, or hands/arms). Both LMTs and volunteers offered participants their choice of auditory stimuli (for example, music, TV, or silence). To minimize disruption of this experience, a sign was put on the door. The presession questionnaire was completed by the participant before starting the session. When, on occasion, this questionnaire led to a longer discussion about symptoms, practitioners were instructed to engage with active listening.

Sessions generally lasted approximately 20 min consistent with other studies of reiki and massage therapy in hospitalized patients,[6–13,17–19,21–23] but were based on the patient's expressed need, the severity or acuity of the patient's condition, the practitioner's patient load, and finally interruptions. Sessions that lasted longer tended to be due to the presence of an emotional release during the treatment.

Positions used for healing arts therapy included: prone with patients head at foot of bed (for back massage), supine (for neck, shoulders, face, and head massage), prone with patient's head at head of bed, lateral recumbent, sitting on edge of bed, sitting up in bed with practitioner working from behind, and supine sitting in recliner with legs elevated. The type of massage used was an eclectic blend of eastern and western techniques that included but was not limited to gentle Swedish (effleurage and petrissage), Esalen, acupressure, and CranioSacral. All techniques used were gentle, light, and slow without utilization of range of motion. There was no deep tissue or sports massage used due to the frailty of the hospitalized patient population.

The vast majority of reiki was delivered with a '' hands-on'' approach. No lubricant was used for reiki. For massage, a lotion called ''Liquid Radiance,'' a blend of oil and cream scented with light lavender and orange was used. Although scented lotion is generally discouraged in cancer patients due to smell sensitivity issues, we selected it for the properties of lavender, which aids in relaxation, and orange, which can be helpful for decreasing nausea. In over 20 years of use, only 1 patient has not tolerated it and that was due to an allergy to a component and not any scent intolerance. Scented lotion is commonly utilized in the field of massage therapy.

Measurements

The patient-reported questionnaires included an 11-point Likert scale (0–10) for the following symptoms: pain, nausea, fatigue, anxiety, depression, and overall well-being. The participants' diagnoses, age, and gender were retrieved from the electronic medical record by the healing arts practitioner. Despite the broad range of diagnoses, for the purposes of this analysis we categorized participants as having a cancer or a noncancer diagnosis. Lastly, the presence of previous sessions during the index hospitalization was self-reported by patients and recorded on the questionnaire. When responding to the ''previous sessions'' question, healing arts practitioners did not guide the patient, so patients may have answered ''none'' and either meant they have never before experienced reiki or massage therapy or they have not had any previous sessions during their current hospitalization.

A centralized excel file was maintained prospectively of this clinic work, and our analysis of that database was approved by the Committee for Protection of Human Subjects (#23918) with consent waived. This database only includes hospitalized patients who were referred and agreed to receive either reiki or massage therapy during their hospital stay.

For our analysis, we only included patients from the database who: (1) reported ''none'' for previous sessions to minimize the bias of including participants who received multiple treatments during the hospitalization, (2) received reiki or massage therapy between June 1st, 2010 and December 8th, 2015, and (3) had both pre- and postsession patient-reported questionnaires completed for their included session. We excluded patients who: (1) did not have reiki or massage therapy listed in the database (i.e., missing), (2) had both reiki and massage therapy combined during their first session.

Using these criteria, we analyzed the impact of reiki or massage on the change in pre- and postsession patient-reported symptoms of hospitalized patients with adjustment for other factors, including therapy received (massage therapy or reiki), primary diagnosis (cancer or noncancer), age, gender, length of session (<15 min, 15–30 min, or >30 min), and baseline/presession symptom score. For the statistical analyses,

Table 3. Summary of Characteristics Between Included Encounters for Reiki or Massage Therapy

Variables	N *(%) or Mean (Std. Deviation)*[a]		
	Massage (N = 880)	*Reiki (N = 705)*	p-*value of comparing massage and reiki*[b]
Gender[c]			
Male	427 (63.26)	255 (60.86)	0.43
Female	248 (36.74)	164 (39.14)	
Session length[d]			
<15 min	326 (46.64)	107 (21.31)	**<0.0001**
16–30 min	349 (49.93)	381 (75.9)	
>30 min	24 (3.43)	14 (2.79)	
Diagnosis[e]			
Cancer	410 (61.38)	218 (53.83)	**0.01**
Noncancer	258 (38.62)	187 (46.17)	
Age	52.19 (17.15)	55 (14.99)	**<0.0001**
Baseline pain	3.3 (2.77)	3.15 (2.78)	0.12
Baseline fatigue	5.1 (2.77)	5.18 (2.82)	0.18
Baseline anxiety	3.64 (3.12)	3.94 (3.14)	**<0.0001**
Baseline nausea	0.99 (1.94)	0.84 (1.96)	0.27
Baseline depression	2.21 (2.86)	2.15 (2.83)	0.70
Baseline well-being	5.78 (2.36)	5.81 (2.17)	0.12

Bold values indicate statistically significant *p*-values.
[a]Missing values were excluded for analysis.
[b]Chi-square test for categorical variables and ANOVA for continuous variables.
[c]491 encounters were missing gender (31% of total).
[d]384 encounters were missing session length (24% of total).
[e]512 encounters were missing diagnosis (32% of total).

we used multiple linear regression to assess the effects of healing arts therapy (massage or reiki), while controlling for baseline symptom score, gender (male or female), session length (less than 15 min, 15–30 min, or greater than 30 min), diagnosis (cancer or noncancer), and age.

For each outcome, we assessed the healing arts therapy indicator, including significant main effects and interactions among the controlling covariates. Adjusted mean for massage and reiki changes from baseline were estimated along with 95% confidence intervals were provided, and *p*-values for a difference in changes between massage and reiki. SAS 9.4 (SAS Institute, Cary, NC) was used to conduct all statistical analyses. A two-sided *p*-value of 0.05 was considered statistically significant.

Results

In our analyses, 1585 patient encounters were included. The average age was 53 years of age (range 3–92 years of age), approximately 62% were male, 59% had a primary diagnosis of cancer, and 56% of the patients received massage. Encounters lasted less than 15 min 36% of the time, between 15 and 30 min 61% of the time, and greater than 30 min 3% of the time. Compared with the encounters with massage therapy, reiki encounters included patients who were older, had more noncancer diagnoses, had higher anxiety at baseline and had longer session lengths (Table 3). Of note, the following categories were missing data: gender (31% missing), diagnosis (32% missing), and length of session (24% missing).

Table 4. Summary of Findings Regarding Change in Symptom Burden Before and After Massage or Reiki in Hospitalized Cancer and Noncancer Patients

Variable	*Massage net change (%)*	*95% CI*	*Reiki net change (%)*	*95% CI2*	p-*value between reiki and massage changes*[a]
Pain[b]	−1.38 (−48.4)	(−1.5 to −1.27)	−1.40 (−49.2)	(−1.52 to −1.28)	0.87
Fatigue[c]	−1.55 (−31.9)	(−1.69 to −1.41)	−2.06 (−40.3)	(−2.23 to −1.89)	**<0.0001**
Anxiety[d]	−1.84 (−53.9)	(−1.98 to −1.7)	−2.21 (−59.8)	(−2.38 to −2.05)	**<0.001**
Nausea[e]	−0.52 (−58.3)	(−0.6 to −0.43)	−0.49 (−60.8)	(−0.59 to −0.38)	0.64
Depression[f]	−0.93 (−46.6)	(−1.04 to −0.82)	−0.99 (−49.7)	(−1.12 to −0.87)	0.46
Well-being[g]	1.45 (37.7)	(1.25–1.66)	1.22 (31.6)	(1.04–1.41)	0.11

Bold values indicate statistically significant *p*-values.
[a]*p*-values were derived using two-sample *t*-test.
[b]Number of observations; massage $N = 661$, reiki $N = 516$.
[c]Number of observations; massage $N = 816$, reiki $N = 634$.
[d]Number of observations; massage $N = 649$, reiki $N = 540$.
[e]Number of observations; massage $N = 251$, reiki $N = 156$.
[f]Number of observations; massage $N = 436$, reiki $N = 341$.
[g]Number of observations; massage $N = 305$, reiki $N = 327$.

All symptoms improved immediately after reiki or massage therapy (Table 4). Each symptom improved by 1–2 points, except for nausea, which only improved by 0.5 points. Relative improvement percentages can be found in Table 4.

We explored differences in immediate symptom relief between patients who received reiki and those that received massage therapy. Reiki showed statistically greater improvement for fatigue (−2.06 vs. −1.55, $p < 0.0001$) and anxiety (−2.21 vs. −1.84, $p < 0.001$) compared with massage therapy. Pain, nausea, depression, and well-being changes were not statistically different between reiki and massage encounters (Table 4). We also explored other factors that may impact the immediate symptom relief offered by reiki or massage therapy. Diagnosis, length of session, age, baseline symptoms, and gender were not associated with differences in immediate symptom benefit from reiki or massage therapy.

Discussion

Patients and healthcare systems are increasingly looking to complementary and alternative approaches in hospital settings to improve symptoms and the patient experience. Controlled trials are challenging to generalize to a heterogeneous hospitalized population, and practice-based studies in the literature predominantly look at the cancer population. To confirm the symptomatic benefits of massage therapy and reiki seen in selected controlled trials and assess the magnitude of the benefit in a more real-world and system-based perspective, we assessed the immediate symptom relief after a first session of reiki or massage therapy over 5 years of our clinical experience for inpatients at our rural academic hospital.

Overall, we found that massage therapy offers immediate symptom relief after the first session. We found a similar magnitude of benefit as found in the other large practice-based study, which focused on oncology inpatients.[11] For depression, anxiety, pain, and fatigue they found similar absolute improvements in symptoms of 1–2 points out of a similar 11-point scale with comparable percentage improvement (ranging from 42.9% to 59.9%). In addition, the absolute improvement they found in nausea was 0.7 points similar to our findings. Of note, they found anxiety to improve by close to three points, which was a more robust benefit than seen in our patient population (change in 1.8 points), although our percentage improvement was similar (59.9% and 53.9%).

Practice-based research for the impact of massage therapy on pain and anxiety in cardiology and oncology inpatients also found improvements of 1–2 points on an 11-point scale as well as comparable percentage improvements.[14,15] For example, we found massage improved pain by 48.4% and anxiety by 53.9%. In comparison, oncology patients reported 48.5% and 55.8% improvements in pain and anxiety, respectively, whereas cardiology patients reported 46.6% and 51.7% improvements in pain and anxiety, respectively.[14,15] In addition, the amount of pain and anxiety improvements we see in our report are also similar to controlled trials on massage therapy in hospitalized patients.[7,10,12,13,17]

Although studies of hospitalized patients have mostly looked at the benefit of massage therapy for surgical and oncology populations, we were interested to see if there may be similar benefits for noncancer patients who were hospitalized. We were unable to find a difference in immediate symptom relief between patients who had a primary diagnosis of cancer and those that did not. Our findings are supported by other practice-based observations which report similar percentage improvements in pain and anxiety symptom relief in oncology and cardiology patients.[14,15] These findings indicate that the benefits of massage therapy may be more symptom specific than they are diagnosis specific. We were unable to find previous reports comparing cancer to noncancer inpatients to substantiate our findings. This would require further study in a controlled trial to confirm this conclusion.

Our 5-year clinical experience also revealed that inpatients receiving reiki had symptomatic relief immediately after the therapy. Previous studies listed in Table 2 focus again on surgical and oncology patients who are hospitalized, and mostly focus on pain and anxiety. The benefits we report in this study for pain and anxiety are similar to those seen in studies focusing on inpatients.[14,15,19,20] For example, we found reiki improved pain by 49.2% and anxiety by 59.8%. In comparison, oncology patients reported 41.3% and 56.1% improvements in pain and anxiety, respectively, whereas cardiology patients reported 41.8% and 57% improvements in pain and anxiety, respectively.[14,15]

In addition, although we did not have a control group, we did see improvements in symptom relief from reiki for fatigue, nausea, depression, and well-being that were of a similar magnitude to the benefits for pain and anxiety. Controlled trials of reiki in the inpatient setting should include these broader symptoms to confirm statistically significant improvements compared with placebo and/or control interventions.

Although this study was not designed to compare reiki to massage therapy, we explored if the specific therapy had an impact on the magnitude of symptom relief. First, we found very little difference in symptom relief between these two healing arts therapies after controlling for age, gender, diagnosis, length of session, and baseline symptom levels. Despite there being a relative gap in the literature about the impact of reiki on hospitalized patient populations, our study gives an early indication that reiki may be as beneficial as massage on a number of common symptoms. Second, we observed that reiki appeared to improve anxiety and fatigue more significantly then massage therapy.

There are no studies that compare reiki to massage therapy in a prospective controlled trial, and therefore we can only compare our results to other practice-based studies. Johnson et al. reported on a retrospective analysis of oncology and cardiology inpatients who received bodywork (including massage therapy) or mind–body and energy (including reiki) therapies among other modalities.[14,15] Oncology patients receiving bodywork had improved pain relief compared with mind–body and energy therapies (48.5% vs. 41.3%), whereas there was no difference in anxiety relief (55.8% vs. 56.1%).[14] Cardiology patients experienced more anxiety relief from mind–body and energy therapies compared with bodywork (57% vs. 51.7%), whereas there was some increased pain relief for bodywork compared with mind–body and energy therapies (46.6% vs. 41.8%).[15]

Of interest, in both these studies there is more improvement in anxiety for mind–body and energy therapies compared with bodywork in both cardiology and oncology patients supporting our findings in a heterogeneous hospitalized population. We are not aware of other studies examining the impact of reiki on fatigue for hospitalized patients,

therefore there has been no study comparing the effectiveness of reiki versus massage therapy for this symptom. Controlled trials comparing reiki to massage therapy would be beneficial to control for unmeasured confounders that may be impacting these retrospective and observation-based data.

Our report has many limitations. The fact that our included patients agreed to or asked for reiki or massage as part of their hospitalized care may bias our data toward larger benefits than may be seen if applied to all hospitalized patients. The sessions were not standardized, so patient response may have been attributable to the experience of a particular practitioner (i.e., Reiki level 1 vs Master) or type of massage. Although we captured the first healing arts encounter for a given hospitalization, if a patient was hospitalized a number of times during the data collection period they may be represented more than once, which may bias the conclusion. However, there are approximately 1327 individual patients included in our database out of 1585 encounters identified as 'no previous session' during an index hospitalization, minimizing this bias.

Healing arts therapists helped the patients complete the surveys if asked (due to illness or debility), but this may have biased the patient responses toward a larger magnitude of symptom relief. Because we did not collect post-therapy questionnaires from patients who fell asleep during therapy and therefore did not include these encounters in our analysis, we may have decreased the measured symptomatic impact of the therapies. The use of a scented massage lotion could have also influenced the response of patients who may have benefitted from the aromatherapy, although a prior review was not able to conclusively determine if aromatherapy added to massage therapy improved outcomes in cancer patients.[30]

We also acknowledge that there is significant missing data in terms of gender, session length, and diagnosis so the interpretation of the results must take into account the lack of complete data. Although we attempted to control for gender, age, diagnosis, length of session, and type of healing arts therapy, we were not able to control for pretherapy active listening, unique therapists, and use of touch. Although our session lengths for both reiki and massage therapy were low (15–30 min range), this is similar to the times used in other inpatient studies of reiki and massage therapy, as well as reflect the real-world challenge of hospitalized patients whose care is full of interruptions.

Even with all the limitations described above, the outcomes of the collected data reflect improved symptom relief with either massage or reiki administered in the hospitalized setting to a heterogeneous population who were offered or requested the therapeutic intervention.

Conclusions

In a heterogeneous real-world population of hospitalized patients, including cancer and noncancer diagnoses, receiving either reiki or massage therapy, we found that both improved immediate symptom relief for pain, anxiety, depression, fatigue, nausea, and overall well-being. Reiki may improve fatigue and anxiety more when compared with massage. Symptom relief does not appear to be associated with diagnosis, age, gender, baseline symptoms, or length of sessions.

Given the increasing requests by patients for complementary and alternative therapies, hospitals interested in trying to improve patients' experiences and symptom control nonpharmacologically should consider adding either a reiki or massage therapy program. The choice should not be based on efficacy, but rather on availability of practitioners, cost of training or hiring, or other local factors. One may also have to consider that LMTs are licensed professionals that may require a paid position versus Reiki Practitioners who have less training and could be paid or be a volunteer status.

There are a few future directions for research to consider based on our report. A noninferiority comparison of these two approaches, reiki and massage therapy, is warranted in a prospective, controlled, and randomized setting. In addition, we only looked at first time encounters, but it is our clinical experience that the impact of these therapies may become more pronounced over time. Therefore, assessing the association of repeated therapies over time on symptom burden is needed.

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Author Disclosure Statement

No competing financial interests exist.

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