

## Efficacy of Therapeutic Touch and Reiki Therapy for Pain Relief in Disease Conditions: A Systematic Review

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### Abstract

**Background:** Therapeutic touch (TT), healing touch (HT) and Reiki therapy (RT) are commonly used complementary therapies used in routine practice of healthcare and its delivery. **Objective:** To perform an integrative review of evidence and provide a literature update on the role of touch and Reiki therapy in relieving pain. **Methods:** A systematic review was done using search terms 'TT, HT and RT' and 'pain' was done in PubMed, CINAHL and Google scholar to identify English studies, which were scrutinized through their title, abstract and full text, and then included for data extraction and descriptive synthesis into specialty-based, disease-based and population-based studies of TT, HT and RT. Independent search was performed by two testers and disagreements were solved by consensus in presence of third tester. **Results:** Of the total list of 23 included studies, there were two specialty-specific studies (oncology=1,

critical care=1), 13 disease-specific studies (cancer=4, fibromyalgia=1, degenerative arthritis=1, chronic pain=1, burns=1, headache=1, phantom limb=1, pain=1, spinal cord injury=2), three population-specific studies (elderly people=3) and five procedure-specific studies (colonoscopy=1, post-surgical=2, C-section=1, hysterectomy=1). **Conclusion:** There was limited evidence yet sufficient information that supported use of therapeutic touch and Reiki as an adjunctive treatment for pain relief. There is need for qualitative studies in evaluation and pragmatic studies of intervention using TT, HT or RT.

**Keywords:** Pain management; Complementary therapies; Therapeutic touch; Touch therapy; Healing touch; Reiki therapy.

### Introduction

Complementary therapies such as Tai Chi, Qi Gong, Reiki, Touch therapy are simple and attractive in their philosophy and are easy to apply in routine care both by patient caregivers and healthcare providers alike.[1] There is a growing interest among health care providers,

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especially professional nurses to promote caring-healing approaches in patient care and self-care.[2] Patients and health care professionals alike have become increasingly interested in complementary and alternative therapies that do not rely on expensive, invasive technology, and are holistic in focus.[3]

Therapeutic touch, developed in 1973 by Dolores Krieger, and Dora Kunz, continues to gain ever wider acceptance in the health care field for one reason—it works.[4] Therapeutic touch (TT) is a modern derivative of the laying on of hands that involves touching with the intent to help or heal. Therapeutic Touch (TT) is a complementary modality that has been demonstrated to have internal effects that reduce psychological distress and accelerate relaxation,[5] and also decrease pain and enhance immunity.[6] TT has biobehavioral effects including positive effects on pulse amplitude, blood pressure, pulse rate and body temperature, and psychological effects on stress, self-assessment of health and well-being, and time perception.[7]

Healing touch (HT) produces psychological as well as physiological relaxation thus positively influencing stress perception through its biological effects.[8] HT is considered and recommended as a low-tech, high-efficacy intervention in high-tech settings.[9] HT could be used by nurses to enhance the healing of their patients, for their own personal healing and growth, for improving job satisfaction.[10] HT can be considered as an extension of TT where spiritual aspect of touch is more emphasized than the biological one.[11]

Reiki is an ancient healing method with roots in both Chinese Medicine and Christian healing. It is a treatment used by individuals as an alternative and complement to Western medical treatment.[12] Reiki is a system of natural healing techniques administered by laying of hands and transferring energy from the Reiki practitioner to the recipient.[13] Reiki is a vibrational, or subtle energy, therapy most commonly facilitated by light touch, which is believed to balance the biofield and strengthen the body's ability to heal itself.[14] Reiki was regarded not only as a complementary therapy

for health and disease, but also for life in itself.[15]

Recent growth in quantity of scientific literature[16,17] had led to systematic reviews had provided volumes of evidence for therapeutic/ healing touch[18,19,20,21,22] in anxiety disorders.[23] For Reiki, recent systematic reviews[24,25,26] had expanded its evidence base and facilitated its extended application into fields of primary care,[27] rehabilitation,[28] palliative care[29] in the treatment of terminally ill patients.[30]

Pain is a complex personal, subjective and unpleasant experience involving many sensations and perceptions and it has a profound impact on the well-being of an individual, both physically and psychologically.[31] Pain and discomfort can be alleviated just by touching the sick area and in this way help the patient to be in better contact with the tissue and organs of their body.[32]

Use of touch to relieve pain was used anecdotally for people of all ages especially in children.[33] Through the use of their hands, their intelligence, and their compassion, nurses and midwives have traditionally taken a noninterventionist approach to pain management.[34] The objective of this paper was to perform an integrative review of evidence and provide a literature update on the role of touch and Reiki therapy in relieving pain.

## Methodology

A systematic review was done using search terms “(reiki [Title] OR “touch therapy”[Title] OR “therapeutic touch”[Title] OR “healing touch”[Title]) AND pain[ Title]” was done in PubMed, CINAHL and Google scholar to identify English studies, which were scrutinized through their title, abstract and full text, and then included for data extraction and descriptive synthesis into specialty-based, disease-based and population-based studies of TT, HT and RT. Independent search was

performed by two testers and disagreements were solved by consensus in presence of third tester.

## Results

Of the total list of 23 included studies, there were two specialty-specific studies (oncology=1, critical care=1), 13 disease-specific studies (cancer=4, fibromyalgia=1, degenerative arthritis=1, chronic pain=1, burns=1, headache=1, phantom limb=1, pain=1, spinal cord injury=2), three population-specific studies (elderly people=3) and five procedure-specific studies (colonoscopy=1, post-surgical=2, C-section=1, hysterectomy=1).

### *Specialty-Specific Studies*

#### *Oncology*

Birocco *et al* investigated the role of Reiki in the management of anxiety, pain and global wellness in 118 cancer patients. In the subgroup of 22 patients who underwent the full cycle of 4 treatments, the mean VAS anxiety score decreased from 6.77 to 2.28 and the mean VAS pain score from 4.4 to 2.32. Overall, the sessions were helpful in improving well-being, relaxation, pain relief, sleep quality and reducing anxiety.[13]

#### *Critical Care*

Apostle-Mitchell and MacDonald[35] highlighted their 10-year clinical experience of practising TT in a 30-bed critical care and trauma centre and opined that factors such as ventilatory support, fluctuating levels of consciousness, hemodynamic instability and severity of illness being barriers to the expression and interpretation of pain, TT could be used as a non-invasive, holistic practice that promotes comfort, relaxation, stress reduction and heating- an effective adjunct to pharmacological interventions.

### *Disease-Specific Studies*

#### *Cancer*

Aghabati *et al* carried out a randomized three-groups experimental study-experimental (TT), placebo (placebo TT), and control (usual care) and examined the effect of therapeutic touch (TT) on the pain and fatigue of the 90 cancer patients undergoing chemotherapy. The TT was found to be more effective in decreasing pain and fatigue than the usual care group, while a similar trend was noted for placebo TT group versus usual care.[36]

Jackson *et al* identified 12 studies in their systematic review and found that TT might be an effective non-pharmacologic method to ease patients' pain.[37]

Olson *et al* compared pain, quality of life, and analgesic use in a sample of 24 patients with cancer pain who received either standard opioid management plus rest (Arm A) or standard opioid management plus Reiki (Arm B). Participants in Arm B experienced improved pain control on Days 1 and 4 following treatment, compared to Arm A, and improved quality of life, but no overall reduction in opioid use.[38]

Olson and Hanson evaluated the usefulness of Reiki as an adjuvant to opioid therapy in the management of cancer and non-cancer pain in their pilot study of 20 volunteers experiencing pain at 55 sites. Both instruments showed a highly significant reduction in pain following the Reiki treatment.[39]

#### *Fibromyalgia Syndrome*

Denison tested the effectiveness of 6 therapeutic touch treatments on the experience of pain and quality of life for persons with fibromyalgia syndrome. Therapeutic touch improved pain and quality of life significantly which suggested that it might be an effective therapeutic intervention for persons with fibromyalgia syndrome.[40]

### *Degenerative Arthritis*

Eckes Peck[41] compared Therapeutic Touch (TT) versus routine care and progressive muscle relaxation (PMR) treatment for pain in 82 elders with degenerative arthritis who were randomly assigned to TT or PMR cross-over treatments. TT decreased pain and distress than PMR group, with improvements occurring in both the groups.

### *Chronic Pain*

Smith *et al*[42] investigated the effects of offering Therapeutic Touch (TT) as an adjunct to cognitive behavioral therapy (CBT) for people with chronic pain who were randomized to relaxation training (control group) or TT plus relaxation (experimental). TT Patients were found to fare better in terms of enhanced self-efficacy and unitary power, as well as having lower attrition rates.

### *Burns*

Turner *et al*[43] in their single-blinded randomized clinical trial compared therapeutic touch (TT) versus sham TT as an adjunct to narcotic analgesia in 99 burn patients. Subjects who received TT reported greater reduction in pain and greater reduction in anxiety than did those who received sham TT.

### *Headache*

Keller and Bzdek[44] investigated the effects of TT on tension headache pain in comparison with a placebo simulation of TT in 60 patients who were randomly divided into treatment and placebo groups. The study found that 90% of the subjects exposed to TT experienced a sustained reduction in headache pain, with an average 70% pain reduction sustained for 4 hours following TT.

### *Phantom Limb*

Leskowitz[45] presented a case of 62-year-old man with peripheral vascular disease who was successfully treated for phantom leg pain using the complementary medical technique

of Therapeutic Touch.

### *Pain*

Monroe[46] in their integrative systematic literature review found five studies which revealed a majority of statistically significant positive results for implementing this intervention.

### *Spinal Cord Injury*

Wardell *et al*[47] described two different experiences of receiving a HT session for management of chronic neuropathic pain and its sequelae, utilizing energy field data and reports of seven participants and their HT practitioners. The authors selected two cases involving the most common patterns of response to represent the participants' and practitioners' experiences. Despite variability in perceptions, there were commonalities in the perception of the practitioners in the damage to the energy field and energy centers, with individualized and consistent resolution of the field over time.

Wardell *et al*[48] assessed the role of Healing Touch (HT), in 12 veterans who were assigned to either HT or guided progressive relaxation for six weekly home visits. There was a significant difference in the composite of interference on the Brief Pain Inventory.

### *Population-Specific Studies*

#### *Elderly People*

Decker *et al*[49] determine the feasibility of using a Healing Touch (HT) intervention with 20 non-community-dwelling older adults experiencing persistent pain who were assigned to the HT group that included techniques specific for pain or a Presence Care group. The study findings indicated that both groups showed some improvement in their pain scores with variable effects on other measures, and HT was a feasible intervention for the elderly with pain.

Richeson *et al*[50] evaluated the effect of Reiki in treating 20 community-dwelling older adults

who experience pain, depression, and/or anxiety who were randomly assigned to either an experimental or wait list control group. The experimental group showed better results with patient perceptions of Relaxation; Improved Physical Symptoms, Mood, and Well-Being; Curiosity and a Desire to Learn More; Enhanced Self-Care; and Sensory and Cognitive benefits.

Wardell *et al*[51] studied 20 older adults, 12 receiving the active intervention of HT and 8 receiving the control of presence care and found variable responses ranging from no response to decrease in pain and improvement in other physiological and psychosocial symptoms.

#### *Procedure-Specific Studies*

##### *Colonoscopy*

Bourque *et al*[52] determined whether the use of Reiki decreases the amount of meperidine administered to patients undergoing screening colonoscopy by conducting a comparative study between 25 patients who received Reiki in conjunction with meperidine and five patients who received placebo Reiki in conjunction with meperidine. This pilot study found that there might be a decrease in meperidine required during screening colonoscopy when patients receive Reiki treatments before the procedure.

##### *Post-Surgical/Post-Operative Pain*

McCormack[53] investigated the effects of non-contact therapeutic touch on post-surgical pain in 90 elderly participants who were randomly assigned to three groups (experimental- non-contact touch intervention, control- routine care and placebo- slow metronome sound. 22 out of 30 (73%) in experimental group demonstrated clinically meaningful pain relief.

Meehan[54] in their single-blind, three-group RCT investigated the effects of therapeutic touch on pain experience in 108 postoperative patients who were randomly assigned to receive one of the following: therapeutic touch, a placebo control intervention which mimicked

therapeutic touch, or the standard intervention of a narcotic analgesic. Therapeutic touch was found not to decrease pain but to decrease patients' need for analgesic medication.

##### *Post-Surgical Pain Following C-Section*

Vandervaart *et al*[55] in their randomised, double-blinded study on 80 women with elective C-section who were allocated to either usual care (control, n=40) or three distant reiki sessions in addition to usual care (n=40). There were no differences found for pain, opioid consumption or rate of healing, but lower heart rate and blood pressure were found in Reiki group post surgery.

##### *Hysterectomy*

Vitale and O'Connor[56] in their quasi-randomized experimental study compared the experimental group (n = 10) who received traditional nursing care plus three 30-minute sessions of Reiki and the control group (n = 12) who received traditional nursing care. The experimental group reported less pain and anxiety, and requested fewer analgesics than the control group.

## **Discussion**

The aim of this paper was to perform an integrative review of evidence and provide a literature update on the role of touch and Reiki therapy in relieving pain and the limited evidence yet sufficient information supported use of therapeutic touch and Reiki as an adjunctive treatment for pain relief.

vanderVaart *et al*[24] in their systematic review appraised 12 included trials on reiki therapy and found a low overall quality of reporting despite detecting a significant therapeutic effect of the Reiki intervention in most of the studies.

Lee *et al*[25] identified nine RCTs in their systematic review and found beneficial reports of reiki for depression, pain and anxiety, stress and hopelessness with no effects for functional

recovery, pregnancy-related anxiety, diabetic neuropathic pain and biopsy-related anxiety and depression.

Reiki as a biofield therapy was proposed to work along an unitary field pattern portrait method which as ontologically, epistemologically, and methodologically consistent with the science of unitary human beings.[57] Reiki is a practice that is requested with increasing frequency, is easy to learn, does not require expensive equipment, and in preliminary research, elicits a relaxation response and helps patients to feel more peaceful and experience less pain.[58]

Reiki had positive effects on stress, relaxation, depression, pain, and wound healing,<sup>26</sup> and it provides profound benefits for both the patient and its practitioner.[59] Wright[60] said, "TT provides the patient with extra care and puts the "art" back in nursing, with a very personal act of caring, of giving to another person the sense of being cared for."

There is an increasing emphasis on patient or participant perceptions and experiences during TT, HT or Reiki, which were to be evaluated using self-reported measures like questionnaires for perceived comfort.[61] Future studies should explore use of such measures in patients with pain.

"Best practice guidelines on TT can support nurses in providing consistent, evidence-based quality care enhance reflection on a particular aspect of practice, can 'bring them to life,' facilitating implementation and allowing new possibilities to emerge for improving client care".[62]

Watson's transpersonal caring healing model forms the foundation for energy medicine which is a holistic approach that cares for the human body as well as the spirit by placing a patient's perceived needs first and foremost. This broadens and improves healthcare service delivery towards a paradigm shift of energy-based nursing[63] in its practice, education, research and administration.[64]

There is a growing need for improving quality of reporting and improved presentation

of original results in studies and their abstracts to interpret the safety and efficacy of touch therapy in order to facilitate integration of an evidence-based touch therapy[65] into evidence-based mental health nursing based upon Roger's theory of Science of unitary human beings.[66]

Nield-Anderson L, Ameling[67] summarized their review findings which are apt for present situation as follows; "1. Reiki is an ancient healing art involving the gentle laying on of hands. It can be practiced anytime and anywhere. 2. Reiki can be used as a complementary treatment to medical protocols. 3. Hand positions customarily correspond to the body's endocrine and lymphatic systems and major organs, focusing on seven main chakras. 4. More research investigating the effects of Reiki on persons with psychiatric and medical disorders is necessary."

Future research along a qualitative approach is warranted on population-based and disease-based evaluation studies on participant perceptions and experiences; and intervention studies along a pragmatic approach on etiologically or mechanism-based homogenous subgroups of pain.

Current practice of therapeutic touch is empirically little more than practice of placebo.[68] Future placebo or sham controlled clinical trials that utilize touch as a sham intervention should differentiate it from TT, HT or RT so that the effects, efficacy and effectiveness of active interventions could be interpreted judicially.

## Conclusion

There was limited evidence yet sufficient information that supported use of therapeutic touch and Reiki as an adjunctive treatment for pain relief. There is need for qualitative studies in evaluation and pragmatic studies of intervention using TT, HT or RT.

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